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&lt;210&gt; 2854

&lt;211&gt; 1235

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2854

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Glu	Leu	Phe	Phe	Lys	Asp	Asp	Pro	Glu	Lys	Leu	Phe	Ser	Asp	Leu	Arg
		20						25					30		
Glu	Ile	Gly	His	Gly	Ser	Phe	Gly	Ala	Val	Tyr	Phe	Ala	Arg	Asp	Val
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Arg	Asn	Ser	Glu	Val	Val	Ala	Ile	Lys	Lys	Met	Ser	Tyr	Ser	Gly	Lys
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Gln	Ser	Asn	Glu	Lys	Trp	Gln	Asp	Ile	Ile	Lys	Glu	Val	Arg	Phe	Leu
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Gln	Lys	Leu	Arg	His	Pro	Asn	Thr	Ile	Gln	Tyr	Arg	Gly	Cys	Tyr	Leu
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Arg	Glu	His	Thr	Ala	Trp	Leu	Val	Met	Glu	Tyr	Cys	Leu	Gly	Ser	Ala
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Ser	Asp	Leu	Leu	Glu	Val	His	Lys	Lys	Pro	Leu	Gln	Glu	Val	Glu	Ile
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Ala	Ala	Val	Thr	His	Gly	Ala	Leu	Gln	Gly	Leu	Ala	Tyr	Leu	His	Ser
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His	Asn	Met	Ile	His	Arg	Asp	Val	Lys	Ala	Gly	Asn	Ile	Leu	Leu	Ser
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Glu	Pro	Gly	Leu	Val	Lys	Leu	Gly	Asp	Phe	Gly	Ser	Ala	Ser	Ile	Met
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Ala	Pro	Ala	Asn	Ser	Phe	Val	Gly	Thr	Pro	Tyr	Trp	Met	Ala	Pro	Glu
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Val	Ile	Leu	Ala	Met	Asp	Glu	Gly	Gln	Tyr	Asp	Gly	Lys	Val	Asp	Val
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Trp	Ser	Leu	Gly	Ile	Thr	Cys	Ile	Glu	Leu	Ala	Glu	Arg	Lys	Pro	Pro
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2091

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 Glu Leu Glu Leu Arg Gln Leu Gln Ala Val Gln Arg Thr Arg Ala Glu  
 690                      695                      700  
 Leu Thr Arg Leu Gln His Gln Thr Glu Leu Gly Asn Gln Leu Glu Tyr  
 705                      710                      715                      720  
 Asn Lys Arg Arg Glu Gln Glu Leu Arg Gln Lys His Ala Ala Gln Val  
 725                      730                      735  
 Arg Gln Gln Pro Lys Ser Leu Lys Val Arg Ala Gly Gln Arg Pro Pro  
 740                      745                      750  
 Gly Leu Pro Leu Pro Ile Pro Gly Ala Leu Gly Pro Pro Asn Thr Gly  
 755                      760                      765  
 Thr Pro Ile Glu Gln Gln Pro Cys Ser Pro Gly Gln Glu Ala Val Leu  
 770                      775                      780  
 Asp Gln Arg Met Leu Gly Glu Glu Glu Ala Val Gly Glu Arg Arg  
 785                      790                      795                      800  
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 Ser Leu Val Asp Glu Glu Val Trp Gly Leu Pro Glu Glu Ile Glu Glu  
 835                      840                      845  
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 865                      870                      875                      880  
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 885                      890                      895  
 Pro Val Pro Glu Glu Glu Glu Glu Glu Glu Glu Gly Ala Pro Ile Gly  
 900                      905                      910  
 Thr Pro Arg Asp Pro Gly Asp Gly Cys Pro Ser Pro Asp Ile Pro Pro  
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 Glu Pro Pro Pro Thr His Leu Arg Pro Cys Pro Ala Ser Gln Leu Pro  
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 Gly Leu Leu Ser His Gly Leu Leu Ala Gly Leu Ser Phe Ala Val Gly  
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 Ser Ser Ser Gly Leu Leu Pro Leu Leu Leu Leu Leu Leu Pro Leu  
 965                      970                      975  
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 980                      985                      990  
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 995                      1000                      1005  
 Ala Leu His Leu Pro Ser Ser Leu Phe Leu Leu Leu Ala Gln Gly Thr  
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 Ala Leu Gly Ala Val Leu Gly Leu Ser Trp Arg Arg Gly Leu Met Gly  
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 Val Pro Leu Gly Leu Gly Ala Ala Trp Leu Leu Ala Trp Pro Gly Leu  
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 Ala Leu Pro Leu Val Ala Met Ala Ala Gly Gly Arg Trp Val Arg Gln  
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 Gln Gly Pro Arg Val Arg Arg Gly Ile Ser Arg Leu Trp Leu Arg Val  
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 Ala Val Gly Asp Arg Gly Leu Phe Ala Leu Tyr Pro Lys Thr Asn Lys

1105                      1110                      1115                      1120  
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 Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg Val Trp Val  
                                  1140                      1145                      1150  
 Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser Gln Gly Leu  
                                  1155                      1160                      1165  
 Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly  
                                  1170                      1175                      1180  
 Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg  
 1185                      1190                      1195                      1200  
 Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly  
                                  1205                      1210                      1215  
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 Pro Trp Arg  
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<210> 2855

<211> 1676

<212> DNA

<213> Homo sapiens

<400> 2855

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 1200  
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<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856

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			20					25					30		
Gln	Thr	Ile	Thr	Gly	Ser	Asp	Pro	Glu	Glu	Ala	Ile	Phe	Asp	Thr	Leu
		35					40					45			
Cys	Thr	Asp	Asp	Ser	Ser	Glu	Glu	Ala	Lys	Thr	Leu	Thr	Met	Asp	Ile
	50					55					60				
Leu	Thr	Leu	Ala	His	Thr	Ser	Thr	Glu	Ala	Lys	Gly	Leu	Ser	Ser	Glu
65				70					75					80	
Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr	Pro	Ser	Arg
			85						90					95	
Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr
			100					105					110		
Pro	Ser	Arg	Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro
		115					120				125				
Val	Ile	Thr	Pro	Ser	Trp	Ser	Pro	Gly	Ser	Asp	Val	Thr	Leu	Leu	Ala
	130					135				140					
Glu	Ala	Leu	Val	Thr	Val	Thr	Asn	Ile	Glu	Val	Ile	Asn	Cys	Ser	Ile
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<210> 2857
<211> 1668
<212> DNA
<213> Homo sapiens
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120
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180
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300
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360
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420
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480

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 1080  
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 1140  
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 1200  
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&lt;210&gt; 2858

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2858

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 Pro Glu Cys Ser Val Lys Gly Arg Thr Glu Ser Phe His Cys Pro Pro  
 35 40 45  
 Ala Gln Ser Cys Tyr Pro Val Thr Thr Lys His Glu Cys Ser Asp Lys

50	55	60
Leu Ala Gln Cys Arg Gln Ala Arg Arg Thr Arg Ser Glu Val Thr Leu		
65	70	75
Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro		80
	85	90
Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu		95
	100	105
Asn Asp Pro Ala Ile Lys Gln Asp Ala Leu Leu Leu Glu Arg Trp Ile		110
	115	120
Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys		125
	130	135
Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser		140
	145	150
Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr		155
	160	165
Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr		170
	175	180
Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala		185
	190	195
Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile		200
	205	210
	215	220

&lt;210&gt; 2859

&lt;211&gt; 1029

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

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240
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600
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660
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720
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780

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<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

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			20					25					30		
Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg
		35				40						45			
Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly
	50					55				60					
Val	Gly	Ser	Asn	Ala	Thr	Ser	Ser	Glu	Asp	Phe	Pro	Pro	Pro	Ser	Leu
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Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro
				85					90					95	
Pro	Pro	Pro	Gln	Ser	Leu	Asn	Leu	Leu	Ser	Gln	Ala	Gln	Leu	Gln	Ala
			100					105					110		
Gln	Pro	Leu	Ala	Pro	Gly	Gly	Thr	Gln	Met	Lys	Lys	Lys	Ser	Gly	Phe
		115					120					125			
Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser
		130					135					140			
Asn	Asn	Ser	Ile	Ala	Glu	Asp	Thr	Glu	Ser	Tyr	Asp	Asp	Leu	Asp	Glu
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Ser	His	Thr	Glu	Asp	Leu	Ser	Ser	Ser	Glu	Ile	Leu	Asp	Val	Ser	Leu
				165					170					175	
Ser	Arg	Ala	Thr	Asp	Leu	Gly	Glu	Pro	Glu	Arg	Ser	Ser	Ser	Glu	Glu
			180					185					190		
Thr	Leu	Asn	Asn	Phe	Gln	Glu	Ala	Glu	Thr	Pro	Gly	Ala	Val	Ser	Pro
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		210				215					220				
Asn	Val	Val	Ile	Asn	Gly	Asn	Ala	His	Pro	His	His	Leu	His	His	His
225					230					235					240
His	Gln	Ile	His	His	Gly	His	His	Leu	Gln	His	Gly	His	His	His	Pro
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Ser	His	Val	Ala	Val	Ala	Ser	Ala	Ser	Ile	Thr	Gly	Gly	Pro	Pro	Ser
			260					265					270		
Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile
		275					280						285		
Thr	Pro	Val	Ala	Pro	Thr	Ser	Ala	Val	Ser	Ser	Ser	Gly	Ser	Pro	Ala



290		295		300
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305		310		315
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Ala Val Gly Ser Phe Asn Ser				
	340			

&lt;210&gt; 2861

&lt;211&gt; 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2861

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&lt;210&gt; 2862

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2862

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Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val				
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Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val				
	35	40	45	
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg				

50	55	60
Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro		
65	70	75
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala		80
	85	90
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr		95
	100	105
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys		110
	115	120
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln		125
	130	135
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser		140
145	150	155
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr		160
	165	170
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His		175
	180	185
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr		190
	195	200
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro		205
	210	215
Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu		220
225	230	235
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg		240
	245	250

&lt;210&gt; 2863

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2863

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600  
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<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

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20 25 30  
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35 40 45  
Ser Ser Ser Leu Pro Leu Phe Ser Asp Ala Met Pro Ala Pro Thr Gln  
50 55 60  
Leu Phe Phe Pro Leu Ile Arg Asn Cys Glu Leu Ser Arg Ile Tyr Gly  
65 70 75 80  
Thr Ala Cys Tyr Cys His His Lys His Leu Cys Cys Ser Ser Ser Tyr  
85 90 95  
Ile Pro Gln Ser Arg Leu Arg Tyr Thr Pro His Pro Ala Tyr Ala Thr  
100 105 110  
Phe Cys Arg Pro Lys Glu Asn Trp Trp Gln Tyr Thr Gln Gly Arg Arg  
115 120 125  
Tyr Ala Ser Thr Pro Gln Lys Phe Tyr Leu Thr Pro Pro Gln Val Asn  
130 135 140  
Ser Ile Leu Lys Ala Asn Glu Tyr Ser Phe Lys Val Pro Glu Phe Asp  
145 150 155 160  
Gly Lys Asn Val Ser Ser Ile Leu Gly Phe Asp Ser Asn Gln Leu Pro  
165 170 175  
Ala Asn Ala Pro Ile Glu Asp Arg Arg Ser Ala Ala Thr Cys Leu Gln  
180 185 190  
Thr Arg Gly Met Leu Leu Gly Val Phe Asp Gly His Ala Gly Cys Ala  
195 200 205  
Cys Ser Gln Ala Val Ser Glu Arg Leu Phe Tyr Tyr Ile Ala Val Ser  
210 215 220  
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225 230 235

<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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240

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 gagacatggt tctccaggat gccaaaggaa atgctacctc gtggctacac atattatgaa  
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<210> 2866

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2866

Glu	Arg	Arg	Ser	Ser	Arg	Arg	Gln	Arg	Gln	Phe	Phe	Lys	Phe	Leu	Arg
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			20					25					30		
Ser	Asp	His	Gln	Ser	Arg	Cys	Asn	Gln	Gly	Cys	Val	Ser	Arg	Ser	Lys
		35					40					45			
Arg	Asp	Ile	Ser	Ser	Tyr	Lys	Trp	Lys	Thr	Asp	Ser	Ile	Ile	Gly	Pro
	50					55				60					
Ile	Arg	Leu	Lys	Arg	Asp	Arg	Ser	Ala	Ser	Gly	Asn	Ser	Gly	Phe	Gln
65				70					75					80	
His	Glu	Thr	His	Ala	Glu	Glu	Thr	Pro	Asn	Gln	Pro	Phe	Asn	Ser	Val
			85					90					95		
His	Leu	Phe	Ser	Phe	Met	Val	Leu	Ala	Leu	Asn	Val	Val	Thr	Val	Ala
			100					105					110		
Thr	Ile	Thr	Val	Arg	His	Phe	Val	Asn	Gln	Arg	Ala	Asp	Tyr	Lys	Tyr
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Gln	Lys	Leu	Gln	Asn	Tyr										
			130												

<210> 2867

<211> 444

<212> DNA

<213> Homo sapiens

<400> 2867

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 cagaaggtga ctctgaaggt gtcgccacgg ggaattatcc ttcattccagg ccatcatcca  
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 gctcccagac aacactgctg ccaactcaagg cttgtggcgg cggcacctcg tccatgttgg  
 240  
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 300

tcccagtggc gaccaagctc ttcaaggggg gggcgcagtc ttggcgggcc cccaggacgt  
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 420  
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 444

<210> 2868

<211> 84

<212> PRT

<213> Homo sapiens

<400> 2868

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Lys	Gly	Glu	Glu	Leu	Ser	Ala	Ala	Ala	Ile	Lys	Arg	Ile	Val	Ala	Thr
		20						25					30		
Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
		35					40					45			
Pro	Arg	Gly	Ile	Ile	Leu	His	Pro	Gly	His	His	Pro	Ala	Pro	Arg	Gln
	50					55					60				
His	Cys	Cys	His	Ser	Arg	Leu	Val	Ala	Ala	Ala	Pro	Arg	Pro	Cys	Trp
65					70				75					80	
Trp	Cys	Trp	Arg												

<210> 2869

<211> 5811

<212> DNA

<213> Homo sapiens

<400> 2869

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<210> 2870

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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		35					40					45			
Val	Met	Glu	Met	Ile	Ala	Ala	Leu	Gly	Pro	Gly	Pro	Ser	Pro	Tyr	Pro
	50				55					60					
Leu	Pro	Pro	Pro	Pro	Gly	Gly	Thr	Asn	Ser	Asn	Asp	Tyr	Ser	Ser	Gln
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			85					90					95		
Pro	Gly	Gly	Thr	Ser	Met	Asn	Asp	Phe	Met	His	Gly	Pro	Pro	Gln	Leu
			100					105					110		
Ser	His	Pro	Pro	Asp	Met	Pro	Asn	Asn	Met	Ala	Ala	Leu	Glu	Lys	Pro
		115					120					125			
Leu	Ser	His	Pro	Met	Gln	Glu	Thr	Met	Pro	His	Ala	Gly	Ser	Ser	Asp
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			165						170					175	
Pro	Ser	Gln	Pro	Pro	Arg	Gln	Pro	Pro	Gln	Ala	Ala	Pro	Ser	Ser	His
			180					185					190		
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Ala	Gly	Ala	Gln	Gly	Ala	Ser	Asp	Met	Pro	Glu	Pro	Ser	Leu	Asp	Leu
	210				215						220				
Leu	Pro	Glu	Leu	Thr	Asn	Pro	Asp	Glu	Leu	Leu	Ser	Tyr	Leu	Asp	Pro
225				230					235					240	
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Asn Asn

<210> 2871

<211> 786

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2871

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786

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&lt;210&gt; 2872

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2872

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Gly Thr Met Thr Arg Cys Ser His Gln Gln Ser Pro Tyr Gln Leu Leu
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Phe Gly Glu Pro Tyr Ile Phe Glu Glu Leu Leu Gly Leu Lys Ile Arg
 20             25             30
Ile Ser Pro Asp Ala Phe Phe Gln Ile Asn Thr Ala Gly Ala Glu Met
 35             40             45
Leu Tyr Trp Thr Val Gly Glu Leu Thr Gly Val Asn Ser Asp Thr Ile
 50             55             60
Leu Leu Asp Ile Cys Cys Gly Thr Gly Val Ile Gly Leu Pro Leu Ala
 65             70             75             80
Gln His Thr Ser Arg Val Leu Gly Ile Glu Leu Leu Glu Gln Ala Val
 85             90             95
Glu Asp Ala Arg Trp Thr Ala Ala Phe Asn Gly Ile Thr Asn Ser Glu
100            105            110
Phe His Thr Gly Gln Ala Glu Lys Ile Leu Pro Gly Leu Leu Lys Ser
115            120            125
Lys Glu Asp Gly Gln Ser Ile Val Ala Val Val Asn Pro Ala Arg Ala

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130 135 140  
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<210> 2873  
 <211> 1187  
 <212> DNA  
 <213> Homo sapiens

<400> 2873  
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<210> 2874  
 <211> 248  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2874

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His Ser Met Gln Ala Leu Ser Trp Arg Lys Leu Tyr Leu Ser Arg Ala
      20           25           30
Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala
      35           40           45
Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
      50           55           60
Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
      65           70           75           80
Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
      85           90           95
Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
      100          105          110
Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
      115          120          125
Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
      130          135          140
Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
      145          150          155          160
Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
      165          170          175
Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
      180          185          190
Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
      195          200          205
Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
      210          215          220
Glu Phe Ala Arg Leu Gln Asp Gln Leu Asp His Arg Gly Asp His Pro
      225          230          235          240
Leu Thr Pro Gly Ser His Tyr Ala
      245

```

&lt;210&gt; 2875

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2875

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360

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<210> 2876

<211> 193

<212> PRT

<213> Homo sapiens

<400> 2876

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Gly	Asp	Lys	Leu	Lys	Ala	Cys	Glu	Val	Ser	Lys	Asn	Lys	Asp	Gly	Lys
			20					25					30		
Glu	Gln	Ser	Glu	Thr	Val	Ser	Leu	Ser	Glu	Asp	Glu	Thr	Phe	Ser	Trp
			35				40					45			
Pro	Gly	Pro	Lys	Thr	Val	Thr	Leu	Lys	Arg	Thr	Ser	Gln	Gly	Phe	Gly
			50				55				60				
Phe	Thr	Leu	Arg	His	Phe	Ile	Val	Tyr	Pro	Pro	Glu	Ser	Ala	Ile	Gln
65					70					75				80	
Phe	Ser	Tyr	Lys	Asp	Glu	Glu	Asn	Gly	Asn	Arg	Gly	Gly	Lys	Gln	Arg
			85						90					95	
Asn	Arg	Leu	Glu	Pro	Met	Asp	Thr	Ile	Phe	Val	Lys	Gln	Val	Lys	Glu
			100					105					110		
Gly	Gly	Pro	Ala	Phe	Glu	Ala	Gly	Leu	Cys	Thr	Gly	Asp	Arg	Ile	Ile
			115					120					125		
Lys	Val	Asn	Gly	Glu	Ser	Val	Ile	Gly	Lys	Thr	Tyr	Ser	Gln	Val	Ile
			130				135					140			
Ala	Leu	Ile	Gln	Asn	Ser	Asp	Thr	Thr	Leu	Glu	Leu	Ser	Val	Met	Pro
145					150					155				160	
Lys	Asp	Glu	Asp	Ile	Leu	Gln	Val	Val	Ser	Phe	Ile	Tyr	Ser	Tyr	Met
			165						170					175	
Ser	Cys	Phe	Thr	Val	Met	Asn	Val	Arg	Lys	Ile	Phe	Leu	Arg	Trp	Lys
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Tyr

<210> 2877

<211> 1921

<212> DNA

<213> Homo sapiens

<400> 2877

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 1921

<210> 2878  
 <211> 451  
 <212> PRT  
 <213> Homo sapiens

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 Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val Arg Lys Asp  
 35 40 45  
 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Thr Pro Ala Arg Thr  
 50 55 60  
 Ser Glu Leu Pro Leu Val Met Trp Leu Gln Gly Gly Pro Gly Gly Ser  
 65 70 75 80  
 Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser Asp  
 85 90 95  
 Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu Phe  
 100 105 110  
 Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly  
 115 120 125  
 Ala Tyr Ala Lys Asp Leu Ala Met Val Ala Ser Asp Met Met Val Leu  
 130 135 140  
 Leu Lys Thr Phe Phe Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe  
 145 150 155 160  
 Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly  
 165 170 175  
 Leu Glu Leu Tyr Lys Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn Phe  
 180 185 190  
 Ala Gly Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val  
 195 200 205  
 Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys  
 210 215 220  
 Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala Val  
 225 230 235 240  
 Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu  
 245 250 255  
 Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr Asn Ile Leu  
 260 265 270  
 Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser Leu Glu Phe Thr  
 275 280 285  
 Gln Ser His Leu Val Cys Leu Cys Gln Arg His Val Arg His Leu Gln  
 290 295 300  
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<400> 2879
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900

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&lt;210&gt; 2880

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2880

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			20					25					30		
Leu	Ile	Gln	Pro	Ala	Asn	His	Val	Leu	Pro	Ala	Ser	Phe	Gly	Asn	Ser
		35					40					45			
Asp	Trp	Tyr	Leu	Val	Thr	Gly	Ser	Ser	Leu	Thr	Cys	Thr	Pro	Gly	Pro
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Pro	Val	Xaa	Asp	Lys	Tyr	Ala	Pro	Lys	Leu	Asp	Ser	Pro	Tyr	Phe	Arg
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His	Ser	Ser	Val	Ser	Phe	Phe	Pro	Ser	Phe	Pro	Pro	Ala	Ile	Pro	Gly
			100					105					110		
Leu	Pro	Thr	Leu	Leu	Pro	His	Pro	Gly	Pro	Phe	Gly	Ser	Leu	Gln	Gly
		115				120						125			
Ala	Phe	Gln	Pro	Lys	Thr	Ser	Ser	Pro	Ile	Glu	Val	Ala	Arg	Arg	Ala
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145					150				155					160	
Tyr	Arg	Ala	Val	Val	Lys	Lys	Pro	Gly	Arg	Trp	Cys	Ala	Val	His	Val
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Gln	Ile	Ala	Trp	Gln	Ile	Tyr	Arg	His	Gln	Gln	Lys	Ile	Lys	Glu	Met
	180						185					190			
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Pro	Ser	Phe	Pro	Ala	Pro	Pro	Pro	Trp	Pro	Lys	Ser	Val	Asp	Ala	Glu
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&lt;210&gt; 2881

&lt;211&gt; 3021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2881

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&lt;210&gt; 2882

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2882

Gly	Gln	Gly	Ala	Arg	Ser	Pro	Gln	Cys	Arg	Ala	Ala	Cys	Arg	Gly	Pro
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Arg	Val	Lys	Lys	Ala	Ser	Glu	Gly	Gly	Phe	Cys	Ser	Leu	Arg	Leu	Trp
		20					25					30			
Val	His	Pro	Gln	His	Phe	Leu	Arg	Lys	Arg	Thr	Pro	Ala	Gln	Ala	Gly
	35					40					45				
Pro	Ala	Ile	Ser	Pro	Leu	Pro	Thr	Asp	Ser	Gln	Ser	Pro	Leu	Ala	Ser
	50				55			60							
Pro	Leu	Asp	Val	Ser	Gly	Gln	Gly	Ser	Gly	Gly	Cys	Ser	Phe	Asp	Lys
65				70				75					80		
Lys	Lys	Lys	Lys	Phe	Tyr	Val	Phe	Lys	Leu	Leu	Leu	Gln	Asp	Phe	Asn
				85				90					95		

&lt;210&gt; 2883

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2883

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<210> 2884  
 <211> 172  
 <212> PRT  
 <213> Homo sapiens

<400> 2884  
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 20 25 30  
 Pro Ser Ser Val Asp Thr Tyr Pro Tyr Gly Leu Pro Thr Pro Pro Glu  
 35 40 45  
 Met Ser Pro Leu Asp Val Leu Glu Pro Glu Gln Thr Phe Phe Ser Ser  
 50 55 60  
 Pro Cys Gln Glu Glu His Gly His Pro Arg Arg Ile Pro His Leu Pro  
 65 70 75 80  
 Gly His Pro Tyr Ser Pro Glu Tyr Ala Pro Ser Pro Leu His Cys Ser  
 85 90 95  
 His Pro Leu Gly Ser Leu Ala Leu Gly Gln Ser Pro Gly Val Ser Met  
 100 105 110  
 Met Ser Pro Val Pro Gly Cys Pro Ser Pro Ala Tyr Tyr Ser Pro  
 115 120 125  
 Ala Thr Tyr His Pro Leu His Ser Asn Leu Gln Ala His Leu Gly Gln  
 130 135 140  
 Leu Ser Pro Pro Pro Glu His Pro Gly Phe Asp Ala Leu Asp Gln Leu  
 145 150 155 160  
 Asn Gln Gly Glu Leu Leu Gly Asp Met Asp Arg Asn  
 165 170

<210> 2885  
 <211> 807  
 <212> DNA  
 <213> Homo sapiens

<400> 2885  
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 120  
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 180  
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 240  
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 300

gcccaagcca gagaagagca ggttgaaggg acaattaagc gccttgaaga attttacagc  
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 420  
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 480  
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 780  
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 807

&lt;210&gt; 2886

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2886

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 Ser Gln Phe Ala Glu Phe Asp Asp Glu Leu Asp Ser Met Ala Pro Val  
 20 25 30  
 Gly Arg Asp Ala Glu Thr Leu Gln Lys Gln Lys Glu Thr Ile Lys Ala  
 35 40 45  
 Phe Leu Lys Lys Leu Glu Ala Leu Ile Ala Ser Asn Asp Asn Ala Asn  
 50 55 60  
 Lys Thr Cys Lys Met Met Leu Ala Thr Glu Glu Thr Ser Pro Asp Leu  
 65 70 75 80  
 Val Gly Ile Lys Arg Asp Leu Glu Ala Leu Ser Lys Gln Cys Asn Lys  
 85 90 95  
 Leu Leu Asp Arg Ala Gln Ala Arg Glu Glu Gln Val Glu Gly Thr Ile  
 100 105 110  
 Lys Arg Leu Glu Glu Phe Tyr Ser Lys Leu Lys Glu Phe Ser Ile Leu  
 115 120 125  
 Leu Gln Lys Ala Glu Glu His Glu Glu Ser Gln Gly Pro Val Gly Met  
 130 135 140  
 Glu Thr Glu Thr Ile Asn Gln Gln Leu Asn Met Phe Lys Val Phe Gln  
 145 150 155 160  
 Lys Glu Glu Ile Glu Pro Leu Gln Gly Lys Gln Gln Asp Val Asn Trp  
 165 170 175  
 Leu Gly Gln Gly Leu Ile Gln Ser Ala Ala Lys Ser Thr Ser Thr Gln  
 180 185 190  
 Gly Leu Glu His Asp Leu Asp Asp Val Asn Ala Arg Trp Lys Thr Leu  
 195 200 205  
 Asn Lys Lys Val Ala Gln Arg Ala Ala Gln Leu Gln Glu Ala Leu Leu  
 210 215 220  
 His Cys Gly Arg Phe Gln Asp Ala Leu Glu Ser Leu Leu Ser Trp Met

225                      230                      235                      240  
 Val Asp Thr Glu Glu Leu Val Ala Asn Gln Lys Pro Pro Ser Ala Glu  
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 Phe Lys Val Val Lys Asp Lys Ile Gln Glu Gln Lys Leu  
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<210> 2887  
 <211> 1945  
 <212> DNA  
 <213> Homo sapiens

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 1920  
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 1945

&lt;210&gt; 2888

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2888

Met	Met	Lys	Pro	Ser	Trp	Leu	Ser	Arg	Thr	Glu	Phe	Ser	Lys	Arg	Leu
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Leu	Cys	Arg	Thr	Leu	Trp	Cys	Gln	Ser	Gly	Trp	Ser	Ser	Arg	Ser	Tyr
			20					25					30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg
		35					40					45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
	50					55					60				
Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
65					70					75				80	
Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
				85					90				95		
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
			100					105					110		
Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
		115				120						125			
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
	130					135					140				
Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
145				150						155				160	
Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
			165					170						175	
Phe	Thr	Ile	Glu	Asp	Phe	His	Asn	Thr	Phe	Met	Asp	Leu	Ile	Glu	Gln



180						185						190					
Val	Glu	Lys	Gln	Thr	Ser	Val	Ala	Asp	Leu	Leu	Ala	Ser	Phe	Asn	Asp		
195						200						205					
Gln	Ser	Thr	Ser	Asp	Tyr	Leu	Val	Val	Tyr	Leu	Arg	Leu	Leu	Thr	Ser		
210						215						220					
Gly	Tyr	Leu	Gln	Arg	Glu	Ser	Lys	Phe	Phe	Glu	His	Phe	Ile	Glu	Gly		
225						230						235					
Gly	Arg	Thr	Val	Lys	Glu	Phe	Cys	Gln	Gln	Glu	Val	Glu	Pro	Met	Cys		
245						250						255					
Lys	Glu	Ser	Asp	His	Ile	His	Ile	Ile	Ala	Leu	Ala	Gln	Ala	Leu	Ser		
260						265						270					
Val	Ser	Ile	Gln	Val	Glu	Tyr	Met	Asp	Arg	Gly	Glu	Gly	Gly	Thr	Thr		
275						280						285					
Asn	Pro	His	Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu		
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Tyr	Arg	Pro	Gly	His	Tyr	Asp	Ile	Leu	Tyr	Lys							
305						310						315					

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<210> 2889
<211> 614
<212> DNA
<213> Homo sapiens
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120
ccggaggtgc agctaaaggc caccaaggca gaacaggcag aagggatgga atttggttc
180
aagatgcca agatgaccat gcccagcta gggagggcag agtccccatc acgtggcaag
240
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420
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480
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600
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614

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<210> 2890
<211> 204
<212> PRT
<213> Homo sapiens
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<400> 2890  
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20           25           30
Pro Glu Val Lys Leu Pro Arg Ala Pro Glu Val Gln Leu Lys Ala Thr
35           40           45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
50           55           60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
65           70           75           80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
85           90           95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
100          105          110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
115          120          125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
130          135          140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
145          150          155          160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
165          170          175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
180          185          190
Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
195          200

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&lt;210&gt; 2891

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2891

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480
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565

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&lt;210&gt; 2892

<211> 90  
 <212> PRT  
 <213> Homo sapiens

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 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg  
 35 40 45  
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser  
 50 55 60  
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val  
 65 70 75 80  
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr  
 85 90

<210> 2893  
 <211> 2270  
 <212> DNA  
 <213> Homo sapiens

<400> 2893  
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1200  
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1260  
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&lt;210&gt; 2894

&lt;211&gt; 490

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2894

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Gln Val Ser Val Ser Leu His Pro Gly Thr Gly Leu Phe Ser Pro Phe			
	35	40	45
Cys Ser Val Pro Leu Trp Cys Ile Tyr Phe Leu Ser Phe Cys Ile Val			
	50	55	60
Leu Ser Leu Pro Ser Ala Ser Leu His Leu Cys Leu Ser Cys Leu His			
65	70	75	80
Phe Leu Asn Leu Asp Cys Pro Cys Leu Phe Leu Cys His Ser Leu Ser			
	85	90	95
Ser Pro Ser Val Cys Gly Ser Ala Ser Leu Ser His Ser Pro Tyr Asn			
	100	105	110
Trp Pro Leu Pro Ala Gln Thr Phe Leu Asp Glu Leu His Glu Thr Gly			
	115	120	125
Gln Leu His Ser Met Ser Thr Trp Met Glu Leu Tyr Pro Ala Val Ser			
	130	135	140
Thr Asp Val Arg Phe Ala Asn Met Leu Gly Gln Pro Gly Ser Thr Pro			
145	150	155	160
Leu Asp Leu Phe Lys Phe Tyr Val Glu Glu Leu Lys Ala Arg Phe His			
	165	170	175
Asp Glu Lys Lys Ile Ile Lys Asp Ile Leu Lys Asp Arg Gly Phe Cys			
	180	185	190
Val Glu Val Asn Thr Ala Phe Glu Asp Phe Ala His Val Ile Ser Phe			
	195	200	205
Asp Lys Arg Ala Ala Ala Leu Asp Ala Gly Asn Ile Lys Leu Thr Phe			
	210	215	220
Asn Ser Leu Leu Glu Lys Ala Glu Ala Arg Glu Arg Glu Arg Glu Lys			
225	230	235	240
Glu Glu Ala Arg Arg Met Arg Arg Arg Glu Ala Ala Phe Arg Ser Met			
	245	250	255
Leu Arg Gln Ala Val Pro Ala Leu Glu Leu Gly Thr Ala Trp Glu Glu			
	260	265	270
Val Arg Glu Arg Phe Val Cys Asp Ser Ala Phe Glu Gln Ile Thr Leu			
	275	280	285
Glu Ser Glu Arg Ile Arg Leu Phe Arg Glu Phe Leu Gln Val Leu Glu			
	290	295	300
Thr Glu Cys Gln His Leu His Thr Lys Gly Arg Lys His Gly Arg Lys			
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Gly Lys Lys His His His Lys Arg Ser His Ser Pro Ser Gly Ser Glu			
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Ser Glu Glu Glu Glu Leu Pro Pro Pro Ser Leu Arg Pro Pro Lys Arg			
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Arg Arg Arg Asn Pro Ser Glu Ser Gly Ser Glu Pro Ser Ser Ser Leu			
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Ser Ser His Leu Leu Gly Ala Asp His Gly Leu Arg Lys Ala Lys Lys			
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Ser Glu Thr Asp Pro Glu Glu Lys Ala Gly Lys Glu Ser Asp Glu Lys			
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Glu Gln Glu Gln Asp Lys Asp Arg Glu Leu Gln Gln Ala Glu Leu Pro			

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 <212> DNA  
 <213> Homo sapiens

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 Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala  
 35                      40                      45  
 Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu  
 50                      55                      60  
 Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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Ala	Pro	Ala	Pro	Cys	Ser	Asn	Arg	Leu	Arg	Ser	Pro	Ser	Pro	Pro	Ser
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Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro	Ala
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Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro	Arg
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&lt;210&gt; 2897

&lt;211&gt; 3184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

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<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
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Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
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Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
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Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
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Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
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Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
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Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
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Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
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			165					170						175	
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
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Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
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Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

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 Ala Val Leu Pro Gly Gln Val Val Lys Arg Thr Val Ser Ile Met Asn  
 245 250 255  
 Asn Ser Leu Ala Gln Leu Thr Phe Asn Gln Ser Ile Leu Phe Thr Ile  
 260 265 270  
 Pro Glu Leu Gln Glu Pro Lys Val Leu Thr Leu Ala Pro Phe His Asn  
 275 280 285  
 Ile Thr Leu Lys Pro Lys Glu Val Cys Lys Leu Glu Val Ile Phe Ala  
 290 295 300  
 Pro Lys Lys Arg Val Pro Pro Phe Ser Glu Glu Val Phe Met Glu Cys  
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 Met Gly Leu Leu Arg Pro Leu Phe Leu Leu Ser Gly Cys Cys Gln Ala  
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 Val Gly Ala Arg Phe Lys Trp Asp Ile Lys Lys Phe Glu Pro His Phe  
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 Ser Ile Ser Pro Glu Glu Gly Tyr Ile Thr Ser Gly Met Glu Val Ser  
 385 390 395 400  
 Phe Glu Val Thr Tyr His Pro Thr Glu Val Gly Lys Glu Ser Leu Cys  
 405 410 415  
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 Arg Lys His Gln Gly Thr Leu Phe Pro Leu Pro Asp Gly Thr Gly  
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Ser	Val	Thr	Phe	Ser	Thr	Glu	Cys	Arg	Met	Pro	Asp	Ile	Ala	Leu	Pro															
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Ser	Gln	Phe	Val	Val	Pro	Ala	Asn	Ser	Glu	Gly	Thr	Phe	Ser	Phe	Glu															
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705					710					715					720															
Asn	Thr	Asp	Leu	Gly	Tyr	Tyr	Gln	Tyr	Glu	Leu	Tyr	Leu	Lys	Ala	Thr															
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Pro	Ala	Leu	Pro	Glu	Lys	Pro	Val	His	Phe	Gln	Thr	Val	Leu	Gly	Ser															
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		770				775					780																			
Ile	Asn	Ala	Ala	Pro	Gly	Gly	Gln	Gly	Gly	Thr	Glu	Ala	Ser	Val	Glu															
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Val	Leu	Phe	Glu	Pro	Ser	His	Leu	Gly	Glu	Thr	Lys	Gly	Ile	Leu	Ile															
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Leu	Ser	Ser	Leu	Ala	Gly	Gly	Glu	Tyr	Ile	Ile	Pro	Leu	Phe	Gly	Met															
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Ala	Leu	Pro	Pro	Lys	Pro	Gln	Gly	Pro	Phe	Ser	Ile	Arg	Ala	Gly	Tyr															
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<211> 876

<212> DNA

<213> Homo sapiens

<400> 2899

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&lt;210&gt; 2900

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2900

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Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu	Lys
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Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala	Ile
			165					170						175	
Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr			
		180						185							

&lt;210&gt; 2901

&lt;211&gt; 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

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 660  
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 756

&lt;210&gt; 2902

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2902

Thr	Arg	Arg	Arg	Gly	Ala	Phe	Asp	Phe	Phe	Glu	Lys	Gln	Asp	Gln	Val
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Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
	50					55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70					75				80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
				85					90					95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115					120					125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

130                                      135                                      140  
 Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu  
 145                                      150                                      155

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 <211> 542  
 <212> DNA  
 <213> Homo sapiens

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 240  
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 360  
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 540  
 gt  
 542

<210> 2904  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 2904  
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 1                                      5                                      10                                      15  
 Lys Glu Gly Ile Thr Thr Tyr Phe Ser Gly Asn Cys Thr Met Glu Asp  
 20                                      25                                      30  
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr  
 35                                      40                                      45  
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr  
 50                                      55                                      60  
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser  
 65                                      70                                      75                                      80  
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe  
 85                                      90                                      95  
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu  
 100                                      105                                      110  
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln  
 115                                      120                                      125  
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130                      135                      140  
 His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg  
 145                      150                      155                      160  
 Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala  
                     165                      170                      175  
 Pro Pro Ser Arg  
                     180

<210> 2905

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2905

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 ggattcctcc tctgccagg tttctgctgt cccccaaaa gaaagacatg tagctgggca  
 180  
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 240  
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 480  
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 540  
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 600  
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 660  
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 720  
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 814

<210> 2906

<211> 200

<212> PRT

<213> Homo sapiens

<400> 2906

Phe Ser Tyr Pro Ser Phe Val Tyr Leu Gly Thr Phe Thr Leu Val Asp  
 1                      5                      10                      15  
 Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala  
                     20                      25                      30  
 Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

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      35              40              45
Cys Cys Pro Pro Lys Arg Lys Thr Cys Ser Trp Ala Trp Trp Tyr Thr
  50              55              60
Ser Val Val Pro Val Thr Gln Glu Ala Glu Ala Gly Gly Leu Leu Glu
  65              70              75              80
Pro Arg Cys Ser Arg Leu Gln Trp Ala Val Asn Ala Leu Leu His Ser
      85              90              95
Ser Leu Ser Asn Arg Ala Arg Pro Arg Pro Ser Ser Arg Leu Ser Ile
      100              105              110
Pro Pro Pro Gln His Pro Phe Leu Leu Glu Met Gly Phe Gly Val Val
      115              120              125
Asn Gln Ala Gln Gly Asn Leu Arg Gly Pro Ala Ser Ser Val Arg Cys
      130              135              140
Arg Arg Ser Thr Arg Pro Arg Pro Gly Ser Ala Arg Arg Glu Lys Ala
      145              150              155              160
Ala Thr Pro Gly Val Arg Glu Leu Arg Leu Glu Gly Ala Trp Gln Ala
      165              170              175
Gly Arg Gly Pro Gly Gly Gly Ser Ala Tyr Asp Arg Arg Trp Gly Glu
      180              185              190
Leu Leu Asp Val Lys Gly Pro Leu
      195              200

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&lt;210&gt; 2907

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2907

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  120
aaacagcatc ttcacttttc ccaggtctgt ttccaatttc caacactgtc cccaagatta
  180
caaaggcaaa ggaattcttc ccttaatggt ggacggctct gagactgttc caccctgggc
  240
tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacagccag
  300
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  379

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&lt;210&gt; 2908

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2908

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Met Thr Val Ser Asp Arg Pro Ser Ala Gly Cys Asp Leu Pro Lys Leu
  1              5              10              15
Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr
      20              25              30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

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[illegible]

<210> 2909

<211> 2420

<212> DNA

<213> Homo sapiens

<400> 2909

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120	cattgggccc	ctgtgagcgg	gacggtggct	gagaccgcct	gctgtggcct	tgcgagttct
180	ctgcactcac	tggcaggggt	ttggtgggaa	acggggaagc	tttggcatgg	ttctgtccag
240	ttgcttataa	tcaagaataa	tgagttttga	ggtttacaaa	gagcagaagt	aacatttata
300	cggtctggcat	ttgacaaaag	attgctgata	atatactcat	tccaggaagt	gtaaaaatgc
360	tttaaaggaa	tgataaattg	tacttactgt	ttatggggac	tagatatatt	agaattatag
420	catcattatg	gggacatagt	gtttccctat	aaattcagaa	attctctggt	tgatgtaaaa
480	tcatacttcc	tggttttact	taattagtaa	agaaataaat	aaattagagt	aacatttagt
540	caggtagagt	tactcctttt	tccccttctt	tattaataaa	ttttattttt	agcacaatca
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 1380  
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 2400  
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 2420

&lt;210&gt; 2910

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2910

Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

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Pro	Cys	Thr	Thr	Ser	Asn	Ala	Gly	Val	Trp	Leu	Leu	Leu	Leu	His	Arg
		20						25					30		
Thr	Glu	Pro	Pro	Val	Phe	Cys	Leu	Arg	Ala	Ser	Phe	Met	Ala	Trp	Thr
		35					40					45			
Gly	Asn	Ala	Met	Cys	Ser	His	Lys	Cys	Thr	Thr	Ile	Val	His	Gln	His
	50					55					60				
Leu	Tyr	Asn	Ile	Lys	Gly	Val	Ile	Tyr	Lys	Ser	Thr	Ala	Ile	Val	His
65					70				75					80	
Arg	Met	Val	Met	Ala	Gly	Glu	Pro	Arg	Pro	Pro	Val	Leu	Cys	Ser	Phe
			85					90					95		
Ser	Thr	Gly	Glu	His	Leu	Gly	Ser	Cys	His	Lys	Ala	Arg	Gly	Gly	Pro
		100					105					110			
Ser	Leu	Gly	Leu	Ser	Trp	Gly	Arg	Gln	Gln	Val	Cys	Lys	Asp	Ser	Ser
	115					120					125				
Gly	Pro	Val	Leu	Thr	Gly	Ile	Arg	Gly	Gln	Glu	Arg	Gln	Val	Cys	Leu
	130				135						140				
Cys	Leu	Gly	Leu	Ile	Gly	Arg	Leu	Val							
145					150										

&lt;210&gt; 2911

&lt;211&gt; 1327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2911

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780
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840

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 1327

<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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Ala	Ala	Glu	Pro	Gly	Lys	Arg	Ser	Glu	Gly	Gly	Lys	Thr	Pro	Val	Ala
			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
		35					40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
		50				55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65					70					75				80	
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85						90					95	
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
		115					120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
		130				135					140				
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145					150						155			160	
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165						170					175	
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
		180					185						190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
		195				200						205			
Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ile	Asp	Arg	
	210				215						220				
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

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225                230                235                240
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His
                245                250                255
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
                260                265                270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
                275                280                285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
                290                295                300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305                310                315                320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
                325                330                335
Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn
                340                345                350

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&lt;210&gt; 2913

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2913

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360
g
361

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&lt;210&gt; 2914

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2914

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Met Ala Gly Gly Ser Ser Gly Ser Ser Ser Glu Lys Met Ala Arg Tyr
1          5          10          15
Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe
20          25          30
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly
35          40          45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
50          55          60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65          70          75          80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

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	85		90		95										
His	Gln	Leu	His	Gly	Leu	Ala	His	Phe	Val	His	Asp	Ala	Leu	Asp	Asp
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&lt;210&gt; 2915

&lt;211&gt; 1782

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2915

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<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

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			20					25					30		
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
			35				40					45			
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
	50					55					60				
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
65					70					75					80
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
			85					90						95	
Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
			100					105					110		
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
			115					120				125			
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
	130					135					140				
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
145					150					155					160
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
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Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
			180					185					190		
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
			195				200					205			
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
			210			215					220				
Ile	Glu	Leu	Leu	Lys	His	Glu	Lys	Val	Gln	Leu	Ile	Ser	Glu	Leu	Ala
225				230						235					240
Ala	Lys	Glu	Ser	Leu	Ile	Phe	Gly	Leu	Arg	Thr	Glu	Arg	Lys	Val	Trp
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      290      295      300
Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu
305      310      315      320
Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu
      325      330      335
Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu
      340      345      350
Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys
      355      360      365
Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Glu Ile Arg
      370      375      380
Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu
385      390      395      400
Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu
      405      410      415
Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu
      420      425      430
Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys
      435      440      445
Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln
      450      455      460
Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val
465      470      475      480
His Gln Ile Glu Lys Glu Met Arg Glu Leu Leu Glu Glu Thr Cys Lys
      485      490      495
Asn Lys Lys Thr Met Glu Ala Lys Ile Lys Gln Leu Ala Phe Ala Leu
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Asn Glu Ile Gln Gln Asp Met
      515

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&lt;210&gt; 2917

&lt;211&gt; 2636

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2917

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180
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420

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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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			20					25					30		
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
		35					40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
	50					55				60					
Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65				70					75					80	
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
			85					90						95	
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
			100					105					110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
		115					120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
	130					135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145				150					155					160	
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
			165					170						175	
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
		180					185						190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
		195					200					205			
Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met

210	215	220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu		
225	230	235
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg		240
	245	250
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu		255
	260	265
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		270
	275	280
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		285
	290	295
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln		300
	305	310
Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys		315
	325	330
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser		335
	340	345
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe		350
	355	360
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		365
	370	375
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		380
	385	390
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala		395
	405	410
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		415
	420	425
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser		430
	435	440
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr		445
	450	455
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg		460
	465	470
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg		475
	485	490
Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro		495
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&lt;210&gt; 2919

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2919

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<210> 2920

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

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		20						25					30		
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
		35				40						45			
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50					55					60				
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
65			70					75						80	
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
			85					90						95	
Arg	Pro	Ser	Pro	Lys	Leu	Val	Leu	Ile	Ile	Leu	Gln	Leu	Cys	Arg	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Met	Ser	Val	Glu	Asp	Cys	Gly	Asn	Val	Glu	Leu	Pro
	115					120						125			
Pro	Trp	Ser	Tyr	Ser	Val	Pro	Ser	Leu	Asn	Ser	Glu	Gln	Glu	Asp	
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<210> 2921

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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1855

&lt;210&gt; 2922

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2922

Met Ala Ala Asp Gln Arg Pro Lys Ala Asp Thr Leu Ala Leu Arg Gln

```

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala
35           40           45
Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His
50           55           60
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr
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Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu
85           90           95
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser
100          105          110
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr
115          120          125
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu
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Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly
145          150          155          160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly
165          170          175
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn
180          185          190
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile
195          200          205
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile
210          215          220
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala
225          230          235          240
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245          250          255
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro
260          265          270
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275          280          285
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290          295          300
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val
305          310          315          320
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325          330          335
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340          345          350
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355          360          365
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu
370          375          380
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu
385          390          395          400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro
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Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp
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300  
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420  
tagccataca tgaccatgtc tgacacgggg atatgagagg agtccgtcat ctctcgaaac  
480  
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Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala  
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<212> DNA  
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360  
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420  
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1260  
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1320  
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<210> 2926

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
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Asn	Thr	Lys	Ser	Ala	Arg	Glu	Arg	Ala	Gly	Gln	Asp	Met	Gly	Leu	Glu
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Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu	
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		115					120					125			
Lys	Lys	Thr	Val	Pro	Lys	Lys	Gln	Arg	Asn	Gln	Asp	Arg	Ser	Lys	Ser
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Ala	Ala	Glu	Leu	Glu	Lys	Leu	Met	Pro	Val	Ser	Ala	Gln	Thr	Pro	Lys
145					150					155					160
Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp	Ser
			165						170					175	
Ala	Glu	Glu	Asp	Lys	Glu	Thr	Lys	Arg	Asn	Glu	Ser	Lys	Glu	Lys	Tyr
		180						185					190		
Gln	Lys	Arg	His	Asp	Ser	Asp	Lys	Glu	Glu	Lys	Gly	Arg	Lys	Glu	Pro
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Lys	Gly	Leu	Lys	Thr	Leu	Lys	Glu	Ile	Arg	Asn	Ala	Phe	Asp	Leu	Phe
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Lys	Leu	Thr	Pro	Glu	Glu	Lys	Asn	Asp	Val	Ser	Glu	Asn	Asn	Arg	Lys
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 <212> PRT  
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 Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val  
 50 55 60  
 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys  
 65 70 75 80  
 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu  
 85 90 95  
 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys  
 100 105 110  
 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp  
 115 120 125  
 Ser Lys Glu Leu Gln Arg Phe Lys Ala Val Ser Ala Lys Ser Lys Glu  
 130 135 140  
 Asp Leu Val Ser Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His  
 145 150 155 160  
 Asn Thr Phe Met Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val  
 165 170 175  
 Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu  
 180 185 190  
 Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser  
 195 200 205  
 Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe  
 210 215 220  
 Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His  
 225 230 235 240  
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 245 250 255  
 Met Asp Arg Gly Glu Gly Gly Thr Thr Asn Pro His Ile Phe Pro Glu  
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<210> 2930  
 <211> 1166  
 <212> PRT  
 <213> Homo sapiens

<400> 2930

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Gln Lys Glu Asn Met Ile Asp Lys Asp Val Glu Leu Ser Val Val Leu
      50           55           60
Pro Gly Asp Ile Ile Lys Ser Thr Thr Val His Gly Ser Lys Pro Met
      65           70           75           80
Met Asp Leu Leu Ile Phe Leu Cys Ala Gln Tyr His Leu Asn Pro Ser
      85           90           95
Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
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Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
      130          135          140
Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
      145          150          155          160
Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile
      165          170          175
Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
      180          185          190
Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
      195          200          205
Gly Leu Arg Glu Leu Tyr Ala Met Asp Val Asn Arg Glu Ser Cys Gln
      210          215          220
Ile Ser Gln Asn Leu Asp Ile Met Lys Glu Lys Glu Asn Lys Gly Phe
      225          230          235          240
Phe Ser Phe Phe Gln Arg Ser Lys Lys Lys Arg Asp Gln Thr Ala Ser
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Ala Pro Ala Thr Pro Leu Val Asn Lys His Arg Pro Thr Phe Thr Arg
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Ser Asn Thr Ile Ser Lys Pro Tyr Ile Ser Asn Thr Leu Pro Ser Asp
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Ser Lys Ile Pro Pro His Gln Ser Asp Glu Asn Ser Arg Val Thr Ala

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Ser Pro Glu Glu Leu Ser Ser Pro Glu Thr Phe His Pro Gly Leu Ser		400
	405	410
Ser Gln Glu Gln Cys Thr Ala Pro Lys Leu Met Glu Glu Thr Ser Val		415
	420	425
Phe Glu Cys Pro Gly Thr Pro Glu Ala Ala Ile Thr Ser Leu Thr Ser		430
	435	440
Gly Ile Ser Ser Asp Tyr Ser Leu Glu Glu Ile Asp Glu Lys Glu Glu		445
	450	455
Leu Ser Glu Val Pro Lys Val Glu Ala Glu Asn Ile Ser Pro Lys Ser		460
	465	470
Gln Asp Ile Pro Phe Val Ser Thr Asp Ile Ile Asn Thr Leu Lys Asn		475
	485	490
Asp Pro Asp Ser Ala Leu Gly Asn Gly Ser Gly Glu Phe Ser Gln Asn		495
	500	505
Ser Met Glu Glu Lys Gln Glu Thr Lys Ser Thr Asp Gly Gln Glu Pro		510
	515	520
His Ser Val Val Tyr Asp Thr Ser Asn Gly Lys Lys Val Val Asp Ser		525
	530	535
Ile Arg Asn Leu Lys Ser Leu Gly Pro Asn Gln Glu Asn Val Gln Asn		540
	545	550
Glu Ile Ile Val Tyr Pro Glu Asn Thr Glu Asp Asn Met Lys Asn Gly		555
	565	570
Val Lys Lys Thr Glu Ile Asn Val Glu Gly Val Ala Lys Asn Asn Asn		575
	580	585
Ile Asp Met Glu Val Glu Arg Pro Ser Asn Ser Glu Ala His Glu Thr		590
	595	600
Asp Thr Ala Ile Ser Tyr Lys Glu Asn His Leu Ala Ala Ser Ser Val		605
	610	615
Pro Asp Gln Lys Leu Asn Gln Pro Ser Ala Glu Lys Thr Lys Asp Ala		620
	625	630
Ala Ile Gln Thr Thr Pro Ser Cys Asn Ser Phe Asp Gly Lys His Gln		635
	645	650
Asp His Asn Leu Ser Asp Ser Lys Val Glu Glu Cys Val Gln Thr Ser		655
	660	665
Asn Asn Asn Ile Ser Thr Gln His Ser Cys Leu Ser Ser Gln Asp Ser		670
	675	680
Val Asn Thr Ser Arg Glu Phe Arg Ser Gln Gly Thr Leu Ile Ile His		685
	690	695
Ser Glu Asp Pro Leu Thr Val Lys Asp Pro Ile Cys Ala His Gly Asn		700
	705	710
Asp Asp Leu Leu Pro Pro Val Asp Arg Ile Asp Lys Asn Ser Thr Ala		715
	725	730
Ser Tyr Leu Lys Asn Tyr Pro Leu Tyr Arg Gln Asp Tyr Asn Pro Lys		735
	740	745
Pro Lys Pro Ser Asn Glu Ile Thr Arg Glu Tyr Ile Pro Lys Ile Gly		750
	755	760
Met Thr Thr Tyr Lys Ile Val Pro Pro Lys Ser Leu Glu Ile Ser Lys		765
	770	775
Asp Trp Gln Ser Glu Thr Ile Glu Tyr Lys Asp Asp Gln Asp Met His		780
	785	790
Ala Leu Gly Lys Lys His Thr His Glu Asn Val Lys Glu Thr Ala Ile		795
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<210> 2931
<211> 625
<212> DNA
<213> Homo sapiens
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2163

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 120  
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 180  
 gtgttttttag gttcactctg atgagttgcc atgaaatcaa accaatctaa actgtcatct  
 240  
 ctgttatattt tgtgctgagc tgaatgtttc ctacttggtg atctattagg ctccagatgc  
 300  
 ggtgggggat ctagaactgg gcttccctcg gggctgcctc caggagagaa gatatgtgtg  
 360  
 agccaggcca aaggagcaaa gtggacattg ggttgcttcc atcaccagga gagacagggtg  
 420  
 ttccatggag ggcagacaat gtggaaagta acaagaaaaa aaggctagca ctagattctg  
 480  
 aagcagcagt ctctgctgat aaaccagact cagtactgac tcatcatgtc cccaggaacc  
 540  
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 600  
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 625

<210> 2932

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2932

Met	Cys	Glu	Pro	Gly	Gln	Arg	Ser	Lys	Val	Asp	Ile	Gly	Leu	Leu	Pro
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Ser	Pro	Gly	Glu	Thr	Gly	Val	Pro	Trp	Arg	Ala	Asp	Asn	Val	Glu	Ser
		20					25					30			
Asn	Lys	Lys	Lys	Arg	Leu	Ala	Leu	Asp	Ser	Glu	Ala	Ala	Val	Ser	Ala
		35			40						45				
Asp	Lys	Pro	Asp	Ser	Val	Leu	Thr	His	His	Val	Pro	Arg	Asn	Leu	Gln
	50				55					60					
Lys	Leu	Cys	Lys	Glu	Arg	Ala	Gln	Lys	Leu	Cys	Arg	Asn	Ser	Thr	Arg
65				70				75					80		
Val	Pro	Ala	Gln	Cys	Thr	Val	Pro	Ser	Arg						
			85					90							

<210> 2933

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2933

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 120  
 cgagaaagtc aagaaacgac tagagaactt ctgaaagtta aagacagatt aattgaagta  
 180  
 gaaagaaata atgctacact gcaagcagag aagcaagcgt tgaaaactca actgaagcaa  
 240

cttgagacac agaacaataa tttgcaggct cagattcttg cacttcagag gcagacagtg  
 300  
 tcattacaag aacagaatac cactcttcaa acacagaatg ccaagcttca gggtgaaaat  
 360  
 tccaccctta attcccaaag tacctcactc atgaaccaga atgcccaact cctaattccag  
 420  
 cagtcttctt tagaaaaatga aaatgaatct gtaatcaaag agcgagaaga cctaaaatct  
 480  
 ctctatgatt ctctgatcaa agatcatgaa aagctggaac ttcttcatga acgtcaggct  
 540  
 tcagagtatg aatctcttat ctctaaacat ggaactctga agtctgccc aaaaaatctt  
 600  
 gaggtggaac atagagacct tgaagaccgt tacaatcagt tattaaaaca gaaaggacag  
 660  
 ttggaagatt tggaaaaaat gctcaaag  
 688

<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

Gln	Leu	Arg	Gln	Glu	Leu	Lys	Thr	Val	Lys	Lys	Asn	Tyr	Glu	Ala	Leu
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Lys	Gln	Arg	Gln	Asp	Glu	Glu	Arg	Met	Val	Gln	Ser	Ser	Pro	Pro	Ile
			20				25						30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
		35					40					45			
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
		50				55					60				
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
65					70					75				80	
Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
			85					90					95		
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
			100				105						110		
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
		115					120					125			
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
		130				135					140				
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
145					150					155				160	
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
			165						170					175	
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
			180				185						190		
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
		195				200						205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
210					215						220				
Glu	Lys	Met	Leu	Lys											
225															

<210> 2935  
<211> 1200  
<212> DNA  
<213> Homo sapiens

<400> 2935  
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120  
aactctaaaa gataaagcaa gaaatgtcaa gtaggttttg cacattgggc tgcttttaggc  
180  
tgtgccctct gattcttctg gtgtactcat gatactctcc cttggtgccc tccaggetga  
240  
cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgt  
300  
taaagctggg agaggtttgg tcatggtgac aggggacctg aaggcccagc tcctcttccc  
360  
tcttgccaat acagggacaa gttaaagaag aagaagaaag taaaggtaaa gatggaaaag  
420  
aaatccacgc cctctagggg ctcatcatcc aagtcgtcct caaggcagct aagcgagagc  
480  
ttcaagagca aagagtttgt gtctagtgat gagagctctt cgggagagaa caagagcaaa  
540  
aagaagagga ggaggagcga ggactctgaa gaagaagaac tagccagtac tccccccagc  
600  
tcagaggact cagcgtcagg atccgatgag tagaaacgga ggaaggttct ctttgcgctt  
660  
gccttctcac accccccgga agtcagcagg gaaacgcaga gaactcctat gaaccaccaa  
720  
aaggctgtaa atgatgaaac atgcaaagct agccacataa catcaagtgt ctttcttca  
780  
gcctctctcg gtaaagcatc atctcgaaag ccatttggga tcctttctcc aaatgttctg  
840  
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900  
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960  
gtgaaacctg gaaataccaa ggaaaaaatt gcattctttg catcccacca gtgtagtaac  
1020  
aggataggat ctatgaaaat aaaaagtccc tgggatattg atgggagagc tactaagaga  
1080  
aggaaaaaat caggggatct taaaaagcc aaggtacagg tggaaaggat gagggaggtt  
1140  
aacagcaggt gctaccaacc tgagcctttt gcatgtggca ttgagcactg ttctgtgcac  
1200

<210> 2936  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 2936  
Ser Trp Glu Arg Phe Gly His Gly Asp Arg Gly Pro Glu Gly Pro Ala

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      1           5           10           15
Pro Leu Pro Ser Cys Gln Tyr Arg Asp Lys Leu Lys Lys Lys Lys Lys
      20           25           30
Val Lys Val Lys Met Glu Lys Lys Ser Thr Pro Ser Arg Gly Ser Ser
      35           40           45
Ser Lys Ser Ser Ser Arg Gln Leu Ser Glu Ser Phe Lys Ser Lys Glu
      50           55           60
Phe Val Ser Ser Asp Glu Ser Ser Ser Gly Glu Asn Lys Ser Lys Lys
      65           70           75           80
Lys Arg Arg Arg Ser Glu Asp Ser Glu Glu Glu Glu Leu Ala Ser Thr
      85           90           95
Pro Pro Ser Ser Glu Asp Ser Ala Ser Gly Ser Asp Glu
      100           105

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&lt;210&gt; 2937

&lt;211&gt; 749

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2937

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cgagtcaaaa agctgacatg tcgggtaaaa attaaagaag caacggggct gcccttaaac
120
ctctcaaatt ttgtcttctg tcaatacaca ttctgggacc agtgtgagtc tacggtggct
180
gccccggtgg tggaccccgga ggtgccttca ccacagtcca aggatgcccc gtacacagtg
240
accttctccc actgtaagga ctatgtggtg aatgtaacag aagaatttct ggagttcatt
300
tcagatggag cactggccat tgaagtatgg ggccaccggt gtgctggaaa tggcagctcc
360
atctgggagg tcgattctct tcattgctaag acaagaacac tgcattgacag gtggaatgaa
420
gtaacgcgaa gaatagaaat gtggatctcc atattagaat tgaatgagtt aggagagtat
480
gctgcagtgg aacttcatca ggcaaaagat gtcaacacag gaggcattct tcaacttaga
540
caggggtcatt cccgtagagt acaagtcacg gtgaaacctg tgcagcattc agggacactg
600
ccacttatgg ttgaagccat cctgtcagta tccatcggct gtgtaactgc caggtccacc
660
aaactccaaa gagggctgga cagttaccag agagatgatg aggatggtga tgatatggat
720
agttatcagg aagaagactt aaactgcag
749

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&lt;210&gt; 2938

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2938

Xaa Asn Ser Ser Glu Ser Gly Ser Leu Glu Val Val Asp Ser Ser Gly

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      1           5           10           15
Glu Ile Ile His Arg Val Lys Lys Leu Thr Cys Arg Val Lys Ile Lys
      20           25           30
Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln
      35           40           45
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val
      50           55           60
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val
65           70           75           80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe
      85           90           95
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His
      100          105          110
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His
      115          120          125
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg
      130          135          140
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr
145          150          155          160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile
      165          170          175
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys
      180          185          190
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu
      195          200          205
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg
      210          215          220
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp
225          230          235          240
Ser Tyr Gln Glu Glu Asp Leu Asn Cys
      245

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&lt;210&gt; 2939

&lt;211&gt; 2405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2939

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gagtgcattt gcagatccag accccagagt cagaaggagt gagaaccctg acccctaatt
120
ccactgcatt cagccaatag gagcccagcc accatggcgg agctgcagga ggtgcagatt
180
acagaggaga agccactgtt gccaggacag acgcctgagg cggccaagac tcactctgtg
240
gagacaccat acggtctgtt cactttcact gtctatggca cccccaacc caaacgcccc
300
gcgaccccta cctaccacga tgtgggactc aactataaat cttgcttcca gccactgttt
360
cagttcgagg acatgcagga aatcattcag aactttgtgc gggttcatgt ggatgccctt
420
ggaatggaag agggagcccc tgtgttcctt ttgggatatt agtaccattc tctggaccag
480

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cttcagaca tgatcccttg cgtcctgcag tacctaaatt tctctacaat aattggagtc  
540  
ggtgttggag ctggagccta cctcctggcg agatatgctc ttaaccaccc ggacactgtt  
600  
gaaggctcttgc tctcatcaa cattgatccc aatgcccaagg gttggatgga ttgggcagcc  
660  
cacaagctaa caggcctcac ctctccatt ccggagatga tcttggaca tcttttcagc  
720  
caggaagagc tctctggaaa ttctgagttg atacaaaagt acagaaatat cattacacat  
780  
gcacccaacc tggataacat tgaattgtac tggaaacagct acaacaaccg ccgagacctg  
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1020  
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1080  
cgctgtccc ggtctctgac agcctctctg accagtgcag catccgttga tggcaaccgg  
1140  
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1200  
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1260  
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1320  
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1380  
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1440  
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1740  
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1800  
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1860  
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1920  
tgggctgctt ggggcttggc atagggtgga aagggtacc ctgggctct gaccacactg  
1980  
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2040  
gaggaatcaa agatcaaggt catctccccg catgatctgc ccttttccc ttgcttacgg  
2100

tgaaccaatg tcccttcagc acctcccagg ttagatatgg gggagggtgag ggctgggtcc  
 2160  
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<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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Pro	Gly	Gln	Thr	Pro	Glu	Ala	Ala	Lys	Thr	His	Ser	Val	Glu	Thr	Pro
			20					25					30		
Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg
		35					40					45			
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
	50					55				60					
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn
65					70					75				80	
Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro
				85					90					95	
Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
		100						105					110		
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
	115					120						125			
Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
	130					135					140				
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
145					150					155				160	
Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
				165					170					175	
Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
		180						185					190		
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
	195					200					205				
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn
	210					215					220				
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg
225				230						235				240	
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
				245					250					255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
		260						265					270		
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys



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      275              280              285
Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met Gly Tyr Met Ala
      290              295              300
Ser Ser Cys Met Thr Arg Leu Ser Arg Ser Arg Thr Ala Ser Leu Thr
305              310              315              320
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser
      325              330              335
Gln Ser Ser Glu Ser Gly Thr Leu Ser Ser Gly Pro Pro Gly His Thr
      340              345              350
Met Glu Val Ser Cys
      355

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&lt;210&gt; 2941

&lt;211&gt; 847

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2941

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120
ggtgccagcc ccacagcccc ccagcatctc tttaagcagg gtcagctctc ggcccagggg
180
ggtgcccagc cctcagtgga ggctccagct gccctcggc ccacggccac ccagctgacc
240
cgcgacctgc tgcggagccg tggcattgcc ggtctctaca agggactcgg ggccacgctg
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360
ggccgcccgg cgtccgagga gaagtcgcct ttctacgtgt ccttctctggc cggctgtgtg
420
gctgggagtg ccgccgctgt ggccgtcaac ccctgtgatg tggatgaagac gcggtccag
480
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600
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660
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&lt;210&gt; 2942

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2942

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 1 5 10 15  
 Gly Gly Asn Ala Pro Cys Ile Leu Gln Leu Asp Leu Gln His Leu His  
 20 25 30  
 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln  
 35 40 45  
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro  
 50 55 60  
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr  
 65 70 75 80  
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu  
 85 90 95  
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro  
 100 105 110  
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys  
 115 120 125  
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala  
 130 135 140  
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln  
 145 150 155 160  
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp  
 165 170 175  
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys  
 180 185 190  
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala  
 195 200 205  
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu  
 210 215 220  
 Gln Asp Pro Gln Ala  
 225

&lt;210&gt; 2943

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2943

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 240  
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 300  
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 420  
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 a  
 1501

&lt;210&gt; 2944

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2944

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			20					25				30			
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35				40					45				
Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
	50				55					60					
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
65				70					75					80	
Asn	Leu	Ala	Asn	Ser	His	Ser	Thr	Trp	Asn	Ala	Asn	Tyr	Thr	Ile	Gln

				85					90					95	
Ser	Leu	Lys	Asp	Thr	Lys	Thr	Thr	Val	Asp	Ala	Met	Lys	Leu	Gly	Val
			100					105					110		
Lys	Glu	Met	Lys	Lys	Ala	Tyr	Lys	Gln	Val	Lys	Ile	Asp	Gln	Ile	Glu
		115					120					125			
Asp	Leu	Gln	Asp	Gln	Leu	Glu	Asp	Met	Met	Glu	Asp	Ala	Asn	Glu	Ile
		130					135				140				
Gln	Glu	Ala	Leu	Ser	Arg	Ser	Tyr	Gly	Thr	Pro	Glu	Leu	Asp	Glu	Asp
145					150					155					160
Asp	Leu	Glu	Ala	Glu	Leu	Asp	Ala	Leu	Gly	Asp	Glu	Leu	Leu	Ala	Asp
			165						170					175	
Glu	Asp	Ser	Ser	Tyr	Leu	Asp	Glu	Ala	Ala	Ser	Ala	Pro	Ala	Ile	Pro
		180						185					190		
Glu	Gly	Val	Pro	Thr	Asp	Thr	Lys	Asn	Lys	Asp	Gly	Val	Leu	Val	Asp
		195					200					205			
Glu	Phe	Gly	Leu	Pro	Gln	Ile	Pro	Ala	Ser						
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<210> 2945

<211> 3331

<212> DNA

<213> Homo sapiens

<400> 2945

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240
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300
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360
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420
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900

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 3240  
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 3300  
 aatcattaaa gttcttaatg gattaaaatc a  
 3331

&lt;210&gt; 2946

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2946

Xaa Arg Arg Leu Ala Pro Ser Ser Ala Ser Glu Glu Asn Gly Arg Ser  
 1 5 10 15  
 Pro Ala Val Gly Pro Thr Val Ser Asn Met Ser Gly Leu Asp Gly Val  
 20 25 30  
 Lys Arg Thr Thr Pro Leu Gln Thr His Ser Ile Ile Ile Ser Asp Gln  
 35 40 45  
 Val Pro Ser Asp Gln Asp Ala His Gln Tyr Leu Arg Leu Arg Asp Gln  
 50 55 60  
 Ser Glu Ala Thr Gln Val Met Ala Glu Pro Gly Glu Gly Gly Ser Glu  
 65 70 75 80  
 Thr Val Ala Leu Pro Pro Pro Pro Ser Glu Glu Gly Gly Val Pro  
 85 90 95  
 Gln Asp Ala Ala Gly Arg Gly Gly Thr Pro Gln Ile Arg Val Val Gly  
 100 105 110  
 Gly Arg Gly His Val Ala Ile Lys Ala Gly Gln Glu Glu Gly Gln Pro  
 115 120 125  
 Pro Ala Glu Gly Leu Ala Ala Ala Ser Val Val Met Ala Ala Asp Arg  
 130 135 140  
 Ser Leu Lys Lys Gly Val Gln Gly Gly Glu Lys Ala Leu Glu Ile Cys

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<210> 2947
<211> 997
<212> DNA
<213> Homo sapiens
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<400> 2947
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240
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 997

&lt;210&gt; 2948

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2948

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 Lys Phe Arg His Thr Glu Ala Arg Pro Pro Arg Arg Glu Ser Trp Ile  
 20 25 30  
 Ser Asp Ile Arg Ala Gly Thr Ala Pro Ser Cys Arg Asn His Ile Lys  
 35 40 45  
 Ser Ser Cys Ser Leu Ile Ala Phe Asn Ser Asp Arg Pro Gly Val Leu  
 50 55 60  
 Gly Ile Val Pro Leu Gln Gly Gln Gly Glu Asp Lys Arg Arg Val Ala  
 65 70 75 80  
 His Leu Gly Cys His Ser Asp Leu Val Thr Asp Leu Asp Phe Ser Pro  
 85 90 95  
 Phe Asp Asp Phe Leu Leu Ala Thr Gly Ser Ala Asp Arg Thr Val Lys  
 100 105 110  
 Leu Trp Arg Leu Pro Gly Pro Gly Gln Ala Leu Pro Ser Ala Pro Gly  
 115 120 125  
 Val Val Leu Gly Pro Glu Asp Leu Pro Val Glu Val Leu Gln Phe His  
 130 135 140  
 Pro Thr Ser Asp Gly Ile Leu Val Ser Ala Ala Gly Thr Thr Val Lys  
 145 150 155 160  
 Val Trp Asp Ala Ala Lys Gln Gln Pro Leu Thr Glu Leu Ala Ala His



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      165      170      175
Gly Asp Leu Val Gln Ser Ala Val Trp Ser Arg Asp Gly Ala Leu Val
      180      185      190
Gly Thr Ala Cys Lys Asp Lys Gln Leu Gln Ile Phe Asp Pro Arg Thr
      195      200      205
Lys Pro Arg Ala Ser Gln Ser Thr Gln Ala His Glu Asn Ser Arg Asp
      210      215      220
Ser Arg Leu Ala Trp Met Gly Thr Trp Glu His Leu Val Ser Thr Gly
225      230      235      240
Phe Asn Gln Met Arg Glu Arg Glu Val Lys Leu Trp Asp Thr Arg Phe
      245      250      255
Phe Ser Ser Ala Leu Ala Ser Leu Thr Leu Asp Thr Ser Leu Gly Cys
      260      265      270
Leu Val Pro Leu Leu Asp Pro Asp Ser Gly Leu Leu Val Leu Ala Gly
      275      280      285
Lys Gly Glu Arg Gln Leu Tyr Cys Tyr Glu Val Val Pro Gln Gln Pro
      290      295      300
Ala Leu Ser Pro Val Thr Gln Cys Val Leu Glu Ser Val Leu Arg Gly
305      310      315      320
Ala Ala Leu Val Pro Arg Gln Ala Leu Ala Val Met
      325      330

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&lt;210&gt; 2949

&lt;211&gt; 880

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2949

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 880

<210> 2950  
 <211> 279  
 <212> PRT  
 <213> Homo sapiens

<400> 2950  
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 Lys Gly Lys Arg Pro Asn Leu Lys Val His Ile Asn Thr Thr Ser Asp  
 35 40 45  
 Ser Ile Leu Leu Lys Phe Leu Arg Pro Ser Pro Asn Val Lys Leu Glu  
 50 55 60  
 Gly Leu Leu Leu Gly Tyr Gly Ser Asn Val Ser Pro Asn Gln Tyr Phe  
 65 70 75 80  
 Pro Leu Pro Ala Glu Gly Lys Phe Thr Glu Ala Ile Val Asp Ala Glu  
 85 90 95  
 Pro Lys Tyr Leu Ile Val Val Arg Pro Ala Pro Pro Pro Ser Gln Lys  
 100 105 110  
 Lys Ser Cys Ser Gly Lys Thr Arg Ser Arg Lys Pro Leu Gln Leu Val  
 115 120 125  
 Val Gly Thr Leu Thr Pro Ser Ser Val Phe Leu Ser Trp Gly Phe Leu  
 130 135 140  
 Ile Asn Pro His His Asp Trp Thr Leu Pro Ser His Cys Pro Asn Asp  
 145 150 155 160  
 Arg Phe Tyr Thr Ile Arg Tyr Arg Glu Lys Asp Lys Glu Lys Lys Trp  
 165 170 175  
 Ile Phe Gln Ile Cys Pro Ala Pro Glu Thr Ile Val Glu Asn Leu Lys  
 180 185 190  
 Pro Asn Thr Val Tyr Glu Phe Gly Val Lys Asp Asn Val Glu Gly Gly  
 195 200 205  
 Ile Trp Ser Lys Ile Phe Asn His Lys Thr Val Val Gly Ser Lys Lys  
 210 215 220  
 Val Asn Gly Lys Ile Gln Ser Thr Tyr Asp Gln Asp His Thr Val Pro  
 225 230 235 240  
 Ala Tyr Val Pro Arg Lys Leu Ile Pro Ile Thr Ile Ile Lys Gln Val  
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<210> 2951  
 <211> 3478  
 <212> DNA  
 <213> Homo sapiens

<400> 2951

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<211> 493

<212> PRT

<213> Homo sapiens

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&lt;210&gt; 2954

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2954

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&lt;210&gt; 2958

&lt;211&gt; 1047

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2958

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Ala	Ile	Val	Val	Ser	Val	Gly	Val	Asp	Glu	Glu	Ile	Val	Tyr	Ala	Lys
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Ser	Thr	Ala	Leu	Gln	Thr	Trp	Leu	Phe	Gly	Tyr	Glu	Leu	Thr	Asp	Thr
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Ile	Met	Val	Phe	Cys	Asp	Asp	Lys	Ile	Ile	Phe	Met	Ala	Ser	Lys	Lys

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 Lys Val Glu Phe Leu Lys Gln Ile Ala Asn Thr Lys Gly Asn Glu Asn  
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 Ala Asn Gly Ala Pro Ala Ile Thr Leu Leu Ile Arg Glu Lys Asn Glu  
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 Ser Asn Lys Ser Ser Phe Asp Lys Met Ile Glu Ala Ile Lys Glu Ser  
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 Lys Asn Gly Lys Lys Ile Gly Val Phe Ser Lys Asp Lys Phe Pro Gly  
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 Glu Phe Met Lys Ser Trp Asn Asp Cys Leu Asn Lys Glu Gly Phe Asp  
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 Lys Ile Asp Ile Ser Ala Val Val Ala Tyr Thr Ile Ala Val Lys Glu  
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 Asp Gly Glu Leu Asn Leu Met Lys Lys Ala Ala Ser Ile Thr Ser Glu  
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 Val Phe Asn Lys Phe Phe Lys Glu Arg Val Met Glu Ile Val Asp Ala  
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 Arg Asn Glu Met Thr Ala Glu Glu Lys Arg Arg Ala His Gln Lys Glu  
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Ile	Tyr	Ile	Asp	Lys	Lys	Tyr	Glu	Thr	Val	Ile	Met	Pro	Val	Phe	Gly		
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&lt;210&gt; 2959

&lt;211&gt; 3323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2959

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<211> 868

<212> PRT

<213> Homo sapiens

<400> 2960

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Gly	Glu	Glu	Gln	Ala	Gln	Tyr	Cys	Arg	Ala	Ala	Glu	Glu	Leu	Ser	Lys
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Leu	Glu	Thr	Leu	Leu	Arg	Tyr	Tyr	Asp	Gln	Ile	Cys	Ser	Ile	Glu	Pro
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Lys	Phe	Pro	Phe	Ser	Glu	Asn	Gln	Ile	Cys	Leu	Thr	Phe	Thr	Trp	Lys
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Ser	Arg	Tyr	Asp	Glu	Tyr	Val	Asn	Val	Lys	Asp	Phe	Ser	Asp	Lys	Ile																																	
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Ile	Leu	Thr	Lys	Ser	Arg	Ser	Val	Ile	Glu	Gln	Gly	Gly	Ile	Gln	Thr																																	
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Asp	Asn	Asp	Leu	Arg	Ala	Lys	Phe	Lys	Asp	Arg	Trp	Gln	Arg	Thr	Pro																																	
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Glu	Val	Lys	Lys</																																													

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 Gly Thr Lys Phe Tyr Asn Glu Leu Thr Glu Ile Leu Val Arg Phe Gln  
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 Asn Lys Cys Ser Asp Ile Val Phe Ala Arg Lys Thr Glu Arg Asp Glu  
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 Ser Ile Pro Thr Pro Ala Tyr Gln Ser Leu Pro Ala Gly Gly His Ala  
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 Pro Ser Ala Thr Ala Pro Ser Pro Val Gly Ala Gly Thr Ala Ala Pro  
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 Tyr Pro Pro Val Tyr His Gln Ser Pro Gly Gln Ala Pro Tyr Pro Gly  
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&lt;211&gt; 434

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2961

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 <212> PRT

<213> Homo sapiens

<400> 2964

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      50           55           60
Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly
65           70           75           80
Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val
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<210> 2965

<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965

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&lt;210&gt; 2966

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2966

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<213> Homo sapiens

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Ile	Ile	Ala	Val	Val	Leu	Gly	Val	Ile	Trp	Gly	Val	Leu	Pro	Leu
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Tyr	Leu	Tyr	Phe	Ser	Asn	Tyr	Leu	Gln	Ile	Asp	Glu	Glu	Glu	Tyr	Gly
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Gly	Thr	Trp	Glu	Leu	Thr	Lys	Glu	Gly	Phe	Met	Thr	Ser	Phe	Ala	Xaa
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Val	His	Gly	His	Leu	Asp	His	Leu	Leu	His	Cys	His	Pro	Leu		
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&lt;210&gt; 2969

&lt;211&gt; 667

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2969

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&lt;210&gt; 2970

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2970

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Ser	Gln	Thr	Ile	Met	Ile	Ala	Trp	Gly	Ser	Pro	Ser	Asn	Arg	Asp	Phe
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Met	Glu	Thr	Leu	Asn	Thr	Leu	Lys	Tyr	Ala	Asn	Arg	Ala	Arg	Asn	Ile
	50					55				60					
Lys	Asn	Lys	Val	Val	Val	Asn	Gln	Asp	Lys	Thr	Ala	Ser	Lys	Ser	Met

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&lt;210&gt; 2972

&lt;211&gt; 632

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2972

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 50 55 60  
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 Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu  
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 Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val  
 145 150 155 160  
 Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn  
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 Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu  
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 Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr  
 195 200 205  
 Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp  
 210 215 220  
 Pro Glu Gly Tyr Gln Leu Ser Ser Ala Met Asn Phe Arg Trp Pro Gln  
 225 230 235 240  
 Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu  
 245 250 255  
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 Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Tyr Ile Lys Pro Val  
 305 310 315 320  
 Pro Pro Ala Gln Pro Pro Ala Lys Pro His Thr Arg Ile Ser Ser Arg  
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 Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys  
 355 360 365  
 Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser  
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 Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys  
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 Asp Trp Ala Asp Leu Asp Asp Leu Asp Phe Ser Pro Ser Leu Ser Arg  
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 Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly  
 450 455 460  
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 Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu  
 485 490 495  
 Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu  
 500 505 510  
 Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser  
 515 520 525  
 Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser  
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 Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu  
 545 550 555 560  
 Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile  
 565 570 575  
 Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His  
 580 585 590  
 Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu  
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 610 615 620  
 Ala Ser Lys Tyr Ala Ser Arg Arg  
 625 630

&lt;210&gt; 2973

&lt;211&gt; 858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2973

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 <212> PRT  
 <213> Homo sapiens

<400> 2974  
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 35 40 45  
 Gly Glu Val Val Lys Ala Phe Ile Val Leu Thr Pro Ala Tyr Ser Ser  
 50 55 60  
 His Asp Pro Glu Ala Leu Thr Arg Glu Leu Gln Glu His Val Lys Arg  
 65 70 75 80  
 Val Thr Ala Pro Tyr Lys Thr Pro Arg Lys Val Ala Phe Val Ser Glu  
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 Gln Glu Trp Gly Lys  
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<210> 2975  
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 <212> DNA  
 <213> Homo sapiens

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<210> 2976

<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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			20					25					30		
Thr	Leu	Arg	Trp	Glu	Glu	Thr	Arg	Thr	Pro	Glu	Ser	Gln	Pro	Asp	Thr
		35				40						45			
Pro	Pro	Gly	Thr	Pro	Leu	Val	Ser	Gln	Asp	Glu	Lys	Arg	Asp	Ala	Glu
		50				55				60					
Leu	Pro	Lys	Lys	Arg	Met	Gly	Lys	Ser	Asn	Pro	Gly	Trp	Glu	Asn	Leu
65				70					75				80		
Glu	Lys	Leu	Leu	Val	Phe	Thr	Ala	Ala	Gly	Val	Lys	Pro	Gly	Xaa	Lys

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Val Ala Gly Phe Asp Leu Asp Gly Thr Leu Ile Thr Thr Arg Ser Gly
      100      105      110
Lys Val Phe Pro Thr Gly Pro Ser Asp Trp Arg Ile Leu Tyr Pro Glu
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Ile Pro Arg Lys Leu Arg Glu Leu Glu Ala Glu Gly Tyr Lys Leu Val
      130      135      140
Ile Phe Thr Asn Gln Met Ser Ile Gly Arg Gly Lys Leu Pro Ala Glu
      145      150      155      160
Glu Phe Lys Ala Lys Val Glu Ala Val Val Glu Lys Leu Gly Val Pro
      165      170      175
Phe Gln Val Leu Val Ala Thr His Ala Gly Leu Tyr Arg Lys Pro Val
      180      185      190
Thr Gly Met Trp Asp His Leu Gln Glu Gln Ala Asn Asp Gly Thr Pro
      195      200      205
Ile Ser Ile Gly Asp Ser Ile Phe Val Gly Asp Ala Ala Gly Arg Pro
      210      215      220
Ala Asn Trp Ala Pro Gly Arg Lys Lys Lys Asp Phe Ser Cys Ala Asp
      225      230      235      240
Arg Leu Phe Ala Leu Asn Leu Gly Leu Pro Phe Ala Thr Pro Glu Glu
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Phe Phe Leu Lys Trp Pro Ala Ala Gly Phe Glu Leu Pro Ala Phe Asp
      260      265      270
Pro Arg Thr Val Ser Arg Ser Gly Pro Leu Cys Leu Pro Glu Ser Arg
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Ala Leu Leu Ser Ala Ser Pro Glu Val Val Val Ala Val Gly Phe Pro
      290      295      300
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Tyr Val His Val Thr Gly Thr Arg
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&lt;210&gt; 2977

&lt;211&gt; 1420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2977

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&lt;210&gt; 2978

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2978

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			20					25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35				40						45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
	50				55					60					
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70					75					80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
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Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
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Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

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Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg
      165              170              175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu
      180              185              190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val
      195              200              205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly
      210              215              220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro
      225              230              235              240
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val
      245              250              255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro
      260              265              270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His
      275              280              285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala
      290              295              300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg
      305              310              315              320
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu
      325              330              335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala
      340              345              350
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Arg

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&lt;210&gt; 2979

&lt;211&gt; 2191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2979

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 <213> Homo sapiens

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<210> 2982

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<212> PRT

<213> Homo sapiens

<400> 2982

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His	Ser	Ser	Ser	Ser	Glu	Glu	Ser	Thr	Lys	Arg	Thr	Ser	His	Ser	Lys
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Ser	Thr	Ser	Ala	Leu	Ser	Glu	Ala	Ala	Ser	Asp	Thr	Thr	Gln	Glu	Pro
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<211> 614

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 2986

&lt;211&gt; 988

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2986

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 Lys Glu Glu Glu Pro Asp Pro Glu Pro Pro Val Thr Pro Gln Val  
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Phe	Asp	Thr	Asp	Arg	Pro	Leu	Leu	Ser	Thr	Leu	Glu	Glu	Ser
			725						730				Val
Arg	Ile	Cys	Cys	Ile	Arg	Ser	Phe	Gly	His	Phe	Ile	Ala	Arg
		740						745				750	Leu
Gly	Ser	Ile	Leu	Gln	Phe	Asn	Pro	Glu	Val	Gly	Ile	Phe	Val
		755					760					765	Ser
Ala	Gln	Ser	Glu	Gln	Glu	Ser	Leu	Leu	Gln	Gln	Ala	Gln	Ala
	770					775					780		Gln
Arg	Met	Ala	Gln	Glu	Glu	Ala	Arg	Arg	Asn	Arg	Leu	Met	Arg
785					790				795				Asp
Ala	Gln	Leu	Arg	Leu	Gln	Leu	Glu	Val	Ser	Gln	Leu	Glu	Gly
			805						810				Ser
Gln	Gln	Pro	Lys	Ala	Gln	Ser	Ala	Met	Ser	Pro	Tyr	Leu	Val
		820						825				830	Pro
Thr	Gln	Ala	Leu	Cys	His	His	Leu	Pro	Val	Ile	Arg	Gln	Leu
		835					840					845	Ala
Ser	Gly	Arg	Phe	Ile	Val	Ile	Ile	Pro	Arg	Thr	Val	Ile	Asp
	850					855				860			Gly
Asp	Leu	Leu	Lys	Lys	Glu	His	Pro	Gly	Ala	Arg	Asp	Gly	Ile
865					870				875				Arg
Leu	Glu	Ala	Glu	Phe	Lys	Lys	Gly	Asn	Arg	Tyr	Ile	Arg	Cys
			885					890					Gln
Glu	Val	Gly	Lys	Ser	Phe	Glu	Arg	His	Lys	Leu	Lys	Arg	Gln
		900						905					Asp
Asp	Ala	Trp	Thr	Leu	Tyr	Lys	Ile	Leu	Asp	Ser	Cys	Lys	Gln
		915					920					925	Leu
Leu	Ala	Gln	Gly	Ala	Gly	Glu	Glu	Asp	Pro	Ser	Gly	Met	Val
	930					935					940		Thr
Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly
945					950				955				Pro
Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile
			965					970					Lys
Val	Leu	Asp	Phe	Tyr	Lys	Gln	Trp	Lys	Glu	Ile	Gly		Asn

980

985

<210> 2987  
 <211> 1016  
 <212> DNA  
 <213> Homo sapiens

<400> 2987  
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 acatcaataa ggctcaatac attccttggg gacaggaaga agaaattcaa ctagtcttctt  
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 gaaaggcgggt cctgaaattc acaggggaga gcggatattc caggaggcag tctaagttat  
 180  
 ctgaggcgtg caactcacc agtgagacca agttactgta gttctccagc atcacgtccc  
 240  
 agtacaggtc cctctgagcg tcatccaggt cctgccactc ctcccagggtg aagtgcacag  
 300  
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 360  
 tcacgttctt gtacagggtc ctctaagcat catccacgtc ctgccactct tcccagggtg  
 420  
 agtgcacagc cacatcttca aaggacacca accccagaga tttattcctt tctttagct  
 480  
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 540  
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 600  
 gtgggcgcat cacgggcggg cagggtgaa gtgcagctat gttccagtg tcctctgggt  
 660  
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 720  
 ctggagtgca gtggcacgat ctccgtcac tgcaagctcc acctcccagg ttcacacat  
 780  
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 840  
 ttttttgtgt ttttagtaga gatgggggtt cactatgtta gccaggatgg tcttgatctc  
 900  
 ctgacctcat tactcgccng actccggctc ccaaagtgt ggaattacna gcgtgagaca  
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 1016

<210> 2988  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 2988  
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 Ala His Cys Lys Leu His Leu Pro Gly Ser His His Pro Pro Ala Ser  
 20 25 30  
 Ala Ser Arg Val Ala Gly Thr Thr Gly Thr Arg His Asn Ala Arg Leu

<400> 2989  
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120  
ttccccagtt gtgggagcag acgcgtgggc gcatcgcggg cgggcagggc ctgaagtgca  
180  
gctatgtttc cagtgttttc tggctgtttc caagagctac aagaaaagaa taaatctctg  
240  
gagttgggtgt cctttgagga ggtagctgtg cacttcacct gggaggagtg gcaggacctg  
300  
gatgacgctc agaggaccct gtacaggggac gtgatgctgg agacctacag cagcctggta  
360  
tcattggggc attgcattac caaacctgag atgatcttca agctagagca aggagcagag  
420  
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480  
ttctcaggta tttgccacag gagcctgggtg gagctccagg aggtttgatc tctcttgta  
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660  
tccaaatttc acatcaccag taacaaacta gctgtgatca tggcagatag cctggaaata  
720  
aaactcccct ttttaccctt tgcacagcaa attgacatca aatcctgttt ctactttttt  
780  
ttttttaact attgcttccc tattctgtat tctcactgct ccatctcctg atgtaggagg  
840  
tcactctgtt tctctttttc ctctcctctg actcttaagc cctttcccat tctctttctc  
900  
aggaatggct gttaaaatgc caatatggtc ttgtaacttt cctgtactta gtgaacctcc  
960  
ttattttacac cctgtttgtg aagtggctgt gttcaccctg ggtggacacg gaatgttttt  
1020  
ggcatgtaca aagagaattt tatgctgcct gtgtacagtt attaatttgt aagtacactc  
1080  
agctttttgt atctgtaggt ttaatatctg tgtatgtaag caaacttgga tgcaaaaatat  
1140  
ttgaataaaa atcagatgct tgcactctgta gtgaacataa aaaaa  
1185

<210> 2990  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 2990  
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 20 25 30  
 Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg  
 35 40 45  
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys  
 50 55 60  
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro  
 65 70 75 80  
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys  
 85 90 95  
 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln  
 100 105 110  
 Glu Val

<210> 2991  
 <211> 980  
 <212> DNA  
 <213> Homo sapiens

<400> 2991  
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 120  
 ttggtgggct ccagctgacc cctccagagc ccctgagtgg tggcggctctg cagtcctcag  
 180  
 tcagcagcag cagacgtcac ccgtcataca gggccattca ctgaagtgtc acctggtgcg  
 240  
 cttggttggc cagtcctctg ctcgggactg ctgctgggag gcctgggagc cgcgcacttc  
 300  
 gcctctgcag tctcgggaca ctctctgcg tctttacaag cagcatcttg agaggttagac  
 360  
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 420  
 agcgtttcct tcatgccgcc attcatcaact gtctcagtta ccttgtctgt actttctgca  
 480  
 tcttcctctc cgtcagagct ggcttccatg gccacactgc ctgccgcttc tggctgcact  
 540  
 gccagggcag ccgcactggg agtcagaggg tccatggggt cagtgtctgt ttccatttcc  
 600  
 actggagaat tactccttaa agaattcttt gtgttttctc agggaagagt gaactctgaa  
 660  
 aaagaagccc agcccgtctc tttagttggc atcggtcctc ctgtgtctca gacatcagat  
 720



cccacagaat ccaatggagc accgtgggtt gtttccattg ggacatcaaa gttagctgac  
 780  
 cagttgggtg gttcactcag gtccacctcc attttatcct ccgtgttggc actgctgggt  
 840  
 tcaaacaagt cttgctttgc tccatcttct tcttcagagt ctgtactttc ctactgtct  
 900  
 gtactccccg agctggatcg tctttgggat tctgggtgta atgcgatgtg cttttcctcc  
 960  
 catatatctt cctcatcaga  
 980

<210> 2992

<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

Val	Val	Ala	Val	Cys	Ser	Pro	Gln	Ser	Ala	Ala	Ala	Asp	Val	Thr	Arg
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His	Thr	Gly	Pro	Phe	Thr	Glu	Val	Ser	Pro	Gly	Ala	Leu	Gly	Trp	Pro
			20					25				30			
Val	Leu	Cys	Ser	Gly	Leu	Leu	Leu	Gly	Gly	Leu	Gly	Ala	Ala	His	Phe
		35					40				45				
Ala	Ser	Ala	Val	Ser	Gly	His	Ser	Ser	Ala	Ser	Leu	Gln	Ala	Ala	Ser
	50					55					60				

<210> 2993

<211> 687

<212> DNA

<213> Homo sapiens

<400> 2993

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 120  
 cgatacctca agtttgacat cgagattgga cgtggctcct tcaagacggt gtatcgaggg  
 180  
 ctagacaccg acaccacagt ggaggtggcc tgggtgtgagc tgcagactcg gaaactgtct  
 240  
 agagctgagc ggcagcgctt ctgagaggag gtggagatgc tcaaggggct gcagcaccct  
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 420  
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 480  
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 540  
 ggacctactg gctctgtcaa aatcggggac ctgggcctgg ccacgctcaa gcgcgcctcc  
 600  
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 660

tacgatgagg ccgtggacgt gtacgcg  
687

<210> 2994

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2994

Xaa Cys Pro Arg Ser Arg Glu Pro Leu Met Val Thr Glu Ala Val Ala  
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20 25 30  
Ala Val Ala Thr Ser Pro Asp Gly Arg Tyr Leu Lys Phe Asp Ile Glu  
35 40 45  
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp  
50 55 60  
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser  
65 70 75 80  
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly  
85 90 95  
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val  
100 105 110  
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser  
115 120 125  
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg  
130 135 140  
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu  
145 150 155 160  
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn  
165 170 175  
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly  
180 185 190  
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr  
195 200 205  
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala  
210 215 220  
Val Asp Val Tyr Ala  
225

<210> 2995

<211> 1879

<212> DNA

<213> Homo sapiens

<400> 2995

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120  
acatatagat tcattttctag ttgattcaat cctattttatg tattttaaaat acaaaataat  
180  
ggccatctgg ctagttccaa cggtagagca tgagactctt aaaatacaaa atacatctta  
240

atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttacttttagc ttctgattac  
300  
tttttttattt ttattttttac tttattatta ttattattat ttttgagatg gagtctcact  
360  
ctgntcaccc aggctggaat acagtgggtg gatctcagct cactgcaacc tccacctccc  
420  
aggttcaagc gattctcctg cctcagcctc ctgagtagct gggactctga tagatgcctg  
480  
ccaccacacc cgggtgattt ttgtattttt agtagagacg gggtttcgcc atgttgctca  
540  
ggctgggtctc gaactcccg a cctcaagtga cttgctcacc ttggcctccc aaagtgtctg  
600  
gattacaggt gtgagccact gcacccagcc tggcagtc aa ttttaagcct cctattttccc  
660  
aggtttttagc ttaataatcc tcattagttt ttcagatttt tgtcagtcct gttttggggc  
720  
tattttgcct tagtgggcct aaacagaata ttaaaataca ttaataatcc atactgagag  
780  
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840  
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900  
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960  
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1140  
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aaggctggaa atccttcact tcagtctga tgtgctcctt taccactgca tagaggggga  
1260  
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1320  
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1440  
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1500  
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1560  
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1620  
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1680  
gtacctggag gatataagacc tgaaaacact ggagaaggaa ccaaggactt tcaaagcaaa  
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1860

ccccctctat gcagtggta  
1879

<210> 2996

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2996

His	Gln	Glu	Arg	Asn	Phe	Thr	Leu	Ala	Ser	Asp	Tyr	Phe	Phe	Ile	Phe
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Ile	Phe	Thr	Leu	Leu	Leu	Leu	Leu	Leu	Phe	Leu	Arg	Trp	Ser	Leu	Thr
		20						25					30		
Leu	Xaa	Thr	Gln	Ala	Gly	Ile	Gln	Trp	Cys	Asp	Leu	Ser	Ser	Leu	Gln
		35				40						45			
Pro	Pro	Pro	Pro	Arg	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser
	50					55					60				
Ser	Trp	Asp	Ser	Asp	Arg	Cys	Leu	Pro	Pro	His	Pro	Gly	Asp	Phe	Cys
65					70				75					80	
Ile	Phe	Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Cys	Ser	Gly	Trp	Ser	Arg
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Thr	Pro	Asp	Leu	Lys											
					100										

<210> 2997

<211> 800

<212> DNA

<213> Homo sapiens

<400> 2997

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120  
acaaccatac ctgcttcctc tgagataaca agaattgaga tggagtcaac atccaccctg  
180  
acccccacac caaggagac cagcacctcc caggagatcc actcagccac aaagccaagc  
240  
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300  
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360  
gtgatcacca ggctctctac ctccccatc aagacagaat ctacagaaat gaccattacc  
420  
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480  
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600  
ccgcctctg cctctttctc actggcttca cctgtcttga cctcattttt ttctgttttt  
660  
gccattccc aaaaacctcc accttttttg gttcctgggc aaactttttc cctagggctg  
720

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 780  
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<210> 2998  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 2998  
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 Pro Gly Leu Pro Glu Pro Ser Lys Val Thr Ser Pro Val Val Thr Ser  
 20 25 30  
 Ser Thr Ile Lys Asp Ile Val Ser Thr Thr Ile Pro Ala Ser Ser Glu  
 35 40 45  
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro  
 50 55 60  
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser  
 65 70 75 80  
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met  
 85 90 95  
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr  
 100 105 110  
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser  
 115 120 125  
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly  
 130 135 140  
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr  
 145 150 155 160  
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His  
 165 170 175  
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp  
 180 185 190  
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu  
 195 200 205  
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln  
 210 215 220  
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu  
 225 230 235 240  
 Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro  
 245 250 255  
 Met Asp Asn Leu Phe Glu Lys Gly Pro Phe  
 260 265

<210> 2999  
 <211> 550  
 <212> DNA  
 <213> Homo sapiens

<400> 2999  
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 120  
 tgaggggtgc actgaggaca gcccagtgcg ggccctgcagg cacccttaaa catgaacagc  
 180  
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 acagtgaaga cccacctcca agccagggaa agcctgaagc ctgggggatg ggctcgccagt  
 300  
 cccagaaacc gcaagggcaa cttgtggtgc ttttccttgg gccacccat ggccgcccc  
 360  
 ggacgaattg gcatgcactt tctccctctt gaggcccata aaagcccctg ggctcagcca  
 420  
 gagctgagcg gatattcagga cgacaagctg cacagaggta ctaccatac caaggcctcc  
 480  
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&lt;210&gt; 3000

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3000

Met	Cys	Ser	Ser	Gln	Gln	Arg	Gly	Gly	Leu	Gly	Met	Gly	Ser	Thr	Ser
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Val	Gln	Leu	Val	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
			20					25					30		
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Ser	Met
		35					40					45			
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu	Ala
	50					55				60					
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro	Gly
65					70				75					80	
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly	Ala
			85						90					95	
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val	Lys
			100					105					110		
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser	Ala
		115					120					125			
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys	Trp
	130					135					140				
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu	Ser
145					150					155				160	
Trp	Ala	Val	Thr	Ala	Pro	Gly									
						165									

&lt;210&gt; 3001

&lt;211&gt; 1092

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3001

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 aatagctctg cctggctgag tttgaaaggt cactgttctg tttcagcgtt gagatgcctt  
 120  
 gaagtacaga ggttgagccc ctatgtatgc ctgggggagt cccagaaagt ggaatcccaa  
 180  
 ccttgctcag ctcaccagtg tttcttctat aaccagaca ttgcaaagac agcagtaccc  
 240  
 actgaggcat ccagcccagc tcaggccctg ccaccnnca gtaccaaagc atcattgtca  
 300  
 ggcaagggat acagaacaca gtgctctcac cagactgcag cttgggggac acccagcacg  
 360  
 gagagaagct gaggcggaac tgcactatct accggccctg gttctcccc tacagctact  
 420  
 tegtgtgtgc agacaaagag agccagctgg aggcctatga cttcccagag gtgcagcagg  
 480  
 atgagggcaa gtgggacaac tgcctttctg aggacatggc tgagaacatc tgttcgtcct  
 540  
 cttctcccc agagaacact tgccctcgag aagccaccaa gaaatccagg catggcctgg  
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 gctacaagtg cgtggcctgc tgccgcatgt accccaccct ggacttcctc aagagccaca  
 720  
 tcaagagggg cttcaggag ggcttcagct gcaaggtgta ctaccgcaag ctcaaagccc  
 780  
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 1080  
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 1092

&lt;210&gt; 3002

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3002

Met Ala Pro Phe Arg Ile Pro Gln Asp Val Ile His Asn Ser Ser Ala  
 1 5 10 15  
 Trp Leu Ser Leu Lys Gly His Cys Ser Val Ser Ala Leu Arg Cys Leu  
 20 25 30  
 Glu Val Gln Arg Leu Ser Pro Tyr Val Cys Leu Gly Glu Ser Gln Lys  
 35 40 45  
 Val Glu Ser Gln Pro Cys Ser Ala His Gln Cys Phe Phe Tyr Asn Pro  
 50 55 60  
 Asp Ile Ala Lys Thr Ala Val Pro Thr Glu Ala Ser Ser Pro Ala Gln

```

65          70          75          80
Ala Leu Pro Pro Xaa Ser Thr Lys Ala Ser Leu Ser Gly Lys Gly Tyr
          85          90          95
Arg Thr Gln Cys Ser His Gln Thr Ala Ala Trp Gly Thr Pro Ser Thr
          100          105          110
Glu Arg Ser
          115

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<210> 3003  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

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<400> 3003
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120
ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
180
gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
240
ctgcctggac ccgttcacca gccgccagag cctgcaggca ctagcctgct atgetgacat
300
ctctgtctct gaggggtccg tcccagagtc cgcagacatg gatgtgttac tggagtcctt
360
caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgctgg cagcagaggc
420
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474

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<210> 3004  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

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<400> 3004
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1      5      10      15
Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
20     25     30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
35     40     45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
50     55     60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65     70     75     80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
85     90     95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
100    105    110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
115    120    125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

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130                      135                      140  
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser  
 145                      150                      155

<210> 3005

<211> 799

<212> DNA

<213> Homo sapiens

<400> 3005

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 120  
 ccaggcctcg tgaagattgt ccgcaacagc cggcggaag gactgatccg cgcgcggctg  
 180  
 cagggctgga aggcggccac cgccccagtc gtcggcttct ttgatgcccc cgtcagagtc  
 240  
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgctg  
 300  
 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc  
 360  
 gcccattggt acaactgggg cctctggtgc atgtacatca tcccccgca ggactggctg  
 420  
 gaccgcggcg acgagtcagc acccatcagg accccagcca tgatcggtcg ctcttcgta  
 480  
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 ggcgagaacg tagaactggg catgaggggtg tggcagtgtg gcggcagcat ggaggtgctg  
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 ccctgctccc gcgtggcccc catcgagcgc accaggaagc cctacaacaa cgacattgac  
 660  
 tactacgcca agcgcaacgc cctgcgccacc gccgaggtgt ggatggatga cttcaagtcc  
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 780  
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 799

<210> 3006

<211> 266

<212> PRT

<213> Homo sapiens

<400> 3006

Val His Ser Val Val Asn His Thr Pro Ser Gln Leu Leu Lys Glu Val  
 1                      5                      10                      15  
 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu  
 20                      25                      30  
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg  
 35                      40                      45  
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys  
 50                      55                      60  
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65                                      70                                      75                                      80  
 Asn Thr Gly Trp Ala Glu Pro Ala Leu Ser Arg Ile Arg Glu Asp Arg  
    85                                      90                                      95  
 Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe  
    100                                      105                                      110  
 Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu  
    115                                      120                                      125  
 Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp  
    130                                      135                                      140  
 Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val  
    145                                      150                                      155                                      160  
 Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met  
    165                                      170                                      175  
 Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln  
    180                                      185                                      190  
 Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile  
    195                                      200                                      205  
 Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys  
    210                                      215                                      220  
 Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser  
    225                                      230                                      235                                      240  
 His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp  
    245                                      250                                      255  
 Phe Gly Asp Val Ser Glu Arg Leu Ala Leu  
    260                                      265

<210> 3007  
 <211> 536  
 <212> DNA  
 <213> Homo sapiens

<400> 3007  
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 120  
 actcagctta ttgacctggg agcagacatt agtttgcgga gtcgctggac aaacatgaat  
 180  
 gctttgcatt atgctgctta ttttgatgtc cctgaactta taagagtgat tttgaaaaca  
 240  
 tcgaaaccaa aagatgtgga tgcccttgcc agtgatttta attttggaac agctttgcat  
 300  
 attgcagcat acaacttggtg tgcaggtgct gtgaagtgcc tcttgaggca gggagcaaat  
 360  
 cctgcattta ggaatgacaa aggacagatc cctgctgatg ttgttccaga cccagtagat  
 420  
 atgccgtag agatggctga cgccgcagcc actgctaagg aaatcaagca gatgcttcta  
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 536

<210> 3008  
 <211> 163  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
 1           5           10           15
Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
      20           25           30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
      35           40           45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
      50           55           60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65           70           75           80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
      85           90           95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
      100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
      115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
      130          135          140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
145          150          155          160
Pro Ser Arg

```

&lt;210&gt; 3009

&lt;211&gt; 1335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3009

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120
catggcagta gtctctctgt tctccgccgc cgctagccta gctgagtcgc cggtctctgc
180
gctaggggct cccaccgcct ccgcaggcta aggagccgct gccaccaacg agctgtgagg
240
gttactatgc tccctctttg ccgccgtctc ctctctctgc ccgcgcaggc acccctctgg
300
ctgctcagtc ctgcctcagt gtcaaaccag aagagaagta aaattcaaca aaaatttatg
360
tgtggagttc cttcttaaaa gaagaaaaaa gtgattatgt agactatgga tcggagcaaa
420
cggaattcaa ttgcaggatt tctccacgt gtggagcgtc ttgaagagtt tgaaggaggt
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600
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660

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ctttaagatga acacattgag cagtaaccgg gcaaacatgc tgaaagaagt acagctcatg  
 720  
 aatagactct cccatcccaa catccttagg ttcattgggtg tatgtgttca tcaaggacaa  
 780  
 ttgcatgcac ttacagagta tatcaactcc gggaacctgg aacagttgct agacagtaac  
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 900  
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 1335

<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

Met	Asp	Arg	Ser	Lys	Arg	Asn	Ser	Ile	Ala	Gly	Phe	Pro	Pro	Arg	Val
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Glu	Arg	Leu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val	
		20				25					30				
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
	35					40					45				
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
	50				55					60					
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
65				70				75						80	
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
		85						90					95		
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn
		100						105					110		
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
	115					120					125				
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
	130					135					140				
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile
145				150						155				160	
Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp
		165						170					175		
Leu	Thr	Ser	Lys	Asn	Cys	Leu	Ile	Lys	Arg	Asp	Glu	Asn	Gly	Tyr	Ser

	180		185		190
Ala Val Val	Ala Asp Phe Gly Leu	Ala Glu Lys Ile	Pro Asp Val Ser		
195	200	205			
Met Gly Ser	Glu Lys Leu Ala Val	Val Gly Ser Pro	Phe Trp Met Ala		
210	215	220			
Pro Glu Val	Leu Arg Asp Glu	Pro Tyr Asn Glu	Lys Ala Asp Val Phe		
225	230	235	240		
Ser Tyr Gly	Ile Ile Leu Cys	Glu Ile Ile Val	Arg Ile Gln Ala Asp		
	245	250	255		
Pro Asp Tyr	Leu Pro Arg Thr	Glu Asn Phe Gly	Leu Asp Tyr Asp Ala		
	260	265	270		
Phe Gln His	Met Val Gly Asp	Cys Pro Pro Asp	Phe Leu Gln Leu Thr		
275	280	285			
Phe Asn Cys	Cys Asn Val Ser	Val Phe Leu Pro	Leu Pro Phe Ile Arg		
290	295	300			
Gly Trp Leu	Asn Pro Phe				
305	310				

&lt;210&gt; 3011

&lt;211&gt; 3253

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3011

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 3240  
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 3253

&lt;210&gt; 3012

&lt;211&gt; 870

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3012

Met Asn His Leu Asn Val Leu Ala Lys Ala Leu Tyr Asp Asn Val Ala  
 1 5 10 15  
 Glu Ser Pro Asp Glu Leu Ser Phe Arg Lys Gly Asp Ile Met Thr Val  
 20 25 30  
 Leu Glu Gln Asp Thr Gln Gly Leu Asp Gly Trp Trp Leu Cys Ser Leu  
 35 40 45  
 His Gly Arg Gln Gly Ile Val Pro Gly Asn Arg Leu Lys Ile Leu Val  
 50 55 60  
 Gly Met Tyr Asp Lys Lys Pro Ala Gly Pro Gly Ser Gly Pro Pro Ala  
 65 70 75 80  
 Thr Pro Ala Gln Pro Gln Pro Gly Leu His Ala Pro Ala Pro Pro Ala  
 85 90 95  
 Ser Gln Tyr Thr Pro Met Leu Pro Asn Thr Tyr Gln Pro Gln Pro Asp  
 100 105 110  
 Ser Val Tyr Leu Val Pro Thr Pro Ser Lys Ala Gln Gln Gly Leu Tyr  
 115 120 125  
 Gln Val Pro Gly Pro Ser Pro Gln Phe Gln Ser Pro Pro Ala Lys Gln  
 130 135 140  
 Thr Ser Thr Phe Ser Lys Gln Thr Pro His His Pro Phe Pro Ser Pro  
 145 150 155 160  
 Ala Thr Asp Leu Tyr Gln Val Pro Pro Gly Pro Gly Gly Pro Ala Gln

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Asp Ile Tyr Gln Val Pro Pro Ser Ala Gly Met Gly His Asp Ile Tyr
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Pro Ala Lys Val Val Val Pro Thr Arg Val Gly Gln Gly Tyr Val Tyr
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Glu Ala Ala Gln Pro Glu Gln Asp Glu Tyr Asp Ile Pro Arg His Leu
      225      230      235      240
Leu Ala Pro Gly Pro Gln Asp Ile Tyr Asp Val Pro Pro Val Arg Gly
      245      250      255
Leu Leu Pro Ser Gln Tyr Gly Gln Glu Val Tyr Asp Thr Pro Pro Met
      260      265      270
Ala Val Lys Gly Pro Asn Gly Arg Asp Pro Leu Leu Glu Val Tyr Asp
      275      280      285
Val Pro Pro Ser Val Glu Lys Gly Leu Pro Pro Ser Asn His His Ala
      290      295      300
Val Tyr Asp Val Pro Pro Ser Val Ser Lys Asp Val Pro Asp Gly Pro
      305      310      315      320
Leu Leu Arg Glu Glu Thr Tyr Asp Val Pro Pro Ala Phe Ala Lys Ala
      325      330      335
Lys Pro Phe Asp Pro Ala Arg Thr Pro Leu Val Leu Gly Ala Pro Pro
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Pro Asp Ser Pro Pro Ala Glu Asp Val Tyr Tyr Val Pro Pro Pro Ala
      355      360      365
Pro Asp Leu Tyr Asp Val Pro Pro Gly Leu Arg Arg Pro Gly Pro Gly
      370      375      380
Thr Leu Tyr Asp Val Pro Arg Glu Arg Val Leu Pro Pro Glu Val Ala
      385      390      395      400
Asp Gly Gly Val Val Asp Ser Gly Val Tyr Ala Val Pro Pro Pro Ala
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Glu Arg Glu Ala Pro Ala Glu Gly Lys Arg Leu Ser Ala Ser Ser Thr
      420      425      430
Gly Ser Thr Arg Ser Ser Gln Ser Ala Ser Ser Leu Glu Val Ala Gly
      435      440      445
Pro Gly Arg Glu Pro Leu Glu Glu Val Ala Val Glu Ala Leu Ala
      450      455      460
Arg Leu Gln Gln Gly Val Ser Ala Thr Val Ala His Leu Leu Asp Leu
      465      470      475      480
Ala Gly Ser Ala Gly Ala Thr Gly Gly Trp Arg Ser Pro Ser Glu Pro
      485      490      495
Gln Glu Pro Leu Val Gln Asp Leu Gln Ala Ala Val Ala Ala Val Gln
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Ser Ala Val His Glu Leu Leu Glu Phe Ala Arg Ser Ala Val Gly Asn
      515      520      525
Ala Ala His Thr Ser Asp Arg Ala Leu His Ala Lys Leu Ser Arg Gln
      530      535      540
Leu Gln Lys Met Glu Asp Val His Gln Thr Leu Val Ala His Gly Gln
      545      550      555      560
Ala Leu Asp Ala Gly Arg Gly Gly Ser Gly Ala Thr Leu Glu Asp Leu
      565      570      575
Asp Arg Leu Val Ala Cys Ser Arg Ala Val Pro Glu Asp Ala Lys Gln
      580      585      590
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<213> Homo sapiens
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<210> 3014

<211> 82  
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 <213> Homo sapiens

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 35 40 45  
 Lys Ala Ala Gln Gln Ala Gly Trp Gly Leu Leu Leu Ala Arg Arg Trp  
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<210> 3015  
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 <211> 103  
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 <213> Homo sapiens

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 Lys Pro Pro Trp Gln Leu Cys Pro Arg Ala Phe Ala Phe Cys His Arg  
 35 40 45  
 Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val

50	55	60
Gln Leu Gly Gln Val Lys Phe Ser Cys Glu Asn Ala Ser Pro Asp Thr		
65	70	75
Arg Cys Val Gly Gln Leu Ser Ile Pro Ser Pro Arg Met Pro Trp Gly		80
	85	90
Arg Leu Gln Ala Arg Tyr Val		95
100		

&lt;210&gt; 3017

&lt;211&gt; 4796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3017

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<210> 3018  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

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 Gln Arg Trp Ile Thr Ile Gln His Arg Trp Ser Ser Ala Leu His Cys  
 35 40 45  
 Gln Gly Leu Thr Pro Thr Pro Gly Ala Leu Pro Asn Tyr Leu Lys Val  
 50 55 60  
 Lys Ala Asn Arg Ala Ile Pro Gln Ala Val Thr Ser Thr Arg Leu Gly  
 65 70 75 80  
 Thr Thr Lys Pro Pro Cys Thr Ile Thr Pro Pro Cys Arg Ala Val Arg  
 85 90 95  
 Ser Thr Ser Pro Arg Leu Pro Thr  
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<210> 3019  
 <211> 882  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3020

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3020

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Gly	Pro	Ala	Pro	Val	Leu	Leu	Ser	Ala	Arg	Pro	Gln	Gly	Pro	Ala	Arg
			20					25					30		
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
		35					40					45			
Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
	50						55								

&lt;210&gt; 3021

&lt;211&gt; 1008

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3021

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 1008

&lt;210&gt; 3022

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3022

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Gly	Leu	Phe	Leu	Ser	Ser	Arg	Leu	Glu	Cys	Ser	Gly	Ala	Ile	Met	Asp
			20				25						30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
	35					40					45				
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
	50				55					60					
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
65				70					75					80	
Met	Arg	Gly	Ala	Gln	Arg	Ala	Ala	Thr	Trp	Gly	Pro	Thr	Arg		
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&lt;210&gt; 3023

&lt;211&gt; 1834

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3023

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1680  
atttcaccca cagttcagct ggctgttgat tttcactgca actctgcctt tgtgtgtatt  
1740  
ggcgatcatt tgtaatgctc ttacacttcg tctttaatgt tctTTTTgga gttaggacct  
1800  
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1834

&lt;210&gt; 3024

<211> 347  
 <212> PRT  
 <213> Homo sapiens

<400> 3024  
 Asn Asn Lys His Phe Ser Tyr Ser Arg Phe Arg His Gly Tyr Cys Lys  
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 Gly Asn Pro Arg Lys Met Val Lys Thr Trp Ala Glu Lys Glu Met Arg  
 20 25 30  
 Asn Leu Ile Arg Leu Asn Thr Ala Glu Ile Pro Cys Pro Glu Pro Ile  
 35 40 45  
 Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp  
 50 55 60  
 Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala  
 65 70 75 80  
 Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln  
 85 90 95  
 Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr  
 100 105 110  
 His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His  
 115 120 125  
 Asp His Pro His Ala Leu Glu Phe Leu Arg Lys Asp Cys Ala Asn Val  
 130 135 140  
 Asn Asp Phe Phe Met Arg His Ser Val Ala Val Met Thr Val Arg Glu  
 145 150 155 160  
 Leu Phe Glu Phe Val Thr Asp Pro Ser Ile Thr His Glu Asn Met Asp  
 165 170 175  
 Ala Tyr Leu Ser Lys Ala Met Glu Ile Ala Ser Gln Arg Thr Lys Glu  
 180 185 190  
 Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala  
 195 200 205  
 Tyr Ile Pro Arg Thr Leu Asn Glu Val Lys Asn Tyr Glu Arg Asp Met  
 210 215 220  
 Asp Ile Ile Met Lys Leu Lys Glu Glu Asp Met Ala Met Asn Ala Gln  
 225 230 235 240  
 Gln Asp Asn Ile Leu Pro Asp Cys Tyr Arg Ile Glu Glu Arg Phe Val  
 245 250 255  
 Arg Ser Ser Glu Gly Pro Cys Thr Leu Glu Asn Gln Val Glu Glu Arg  
 260 265 270  
 Thr Cys Ser Asp Ser Glu Asp Ile Gly Ser Ser Glu Cys Ser Asp Thr  
 275 280 285  
 Asp Ser Glu Glu Gln Gly Asp His Ala Arg Pro Lys Lys His Thr Thr  
 290 295 300  
 Asp Pro Asp Ile Asp Lys Lys Glu Arg Lys Lys Met Val Lys Glu Ala  
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 Gln Arg Glu Lys Arg Lys Asn Lys Ile Pro Lys His Val Lys Lys Arg  
 325 330 335  
 Lys Glu Lys Thr Ala Lys Thr Lys Lys Gly Lys  
 340 345

<210> 3025  
 <211> 1370  
 <212> DNA  
 <213> Homo sapiens

<400> 3025  
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120  
agctttctgaa gcatctaggt gatctttctta aatctttgac aggaaagagt aggaaacttt  
180  
ttggcagact tttaacctggt gaatggactt gtttttagaat caaggaaaag aagagaacat  
240  
ctcagtgaag aggatattct tcgaaataag gccatcatgg agagtttgag taaagggtgga  
300  
aacataatgg aacagaatgt tgagccgatt cgaagacagt ctcttacacc tcctcctcag  
360  
aacactatta catgggaaga atatatatct gctgaaaatg gaaaagctcc tcatctgggt  
420  
agagaattgg tgtgcaaaga gagtaagaaa acgttttaag ctacgatagc catgagccag  
480  
gaatttcctt tagggataga gttattattg aatgttttag aagtagtagc tcccttcaag  
540  
cactttaaca agcttagaga atttgttcag atgaagcttc ctccaggctt tcctgtaaaa  
600  
ttagatatac ctgtgtttcc cacaatcaca gccactgtga cttttcagga gtttcgatac  
660  
gatgaatttg atggctccat ctttactata cctgatgact acaagggaaga cccaagccgt  
720  
tttcctgac tttaactgac gtggaaaagg atgccgtcta accaaggaaa gaaaatacag  
780  
agaccctaga agtggatcca aatagaaggg acaaatgctt tcagtgaaga aaagggaatt  
840  
acacattgaa tcgacacatc agtaatacga tacagtgaag tgggcctcta ataagaattt  
900  
cagcgagttt tctgatgtgc ctttttttgt ctttttaaaa atatacatat tataaatgta  
960  
atagtttgac acattaatga ccctaagacc tgcgtatgtg aagcagctat gagtgctgtg  
1020  
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1080  
tatctatata tatatctaaa acactcctgg accattaacg taaattaaat gtcttaagag  
1140  
atatggagcc ctttttaaact tgatcatctt atgcaagggt acattttataa atattccttc  
1200  
gagctttggt ttcataaaat gtaaactatg taacattatg tatagttcag taatttgaat  
1260  
gtttgttcaa tataatgaac tagaaggaat gcaattttct gtagatgaat gaaccaaag  
1320  
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1370

<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3026

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 1           5           10           15
Pro Ile Arg Arg Gln Ser Leu Thr Pro Pro Pro Gln Asn Thr Ile Thr
      20           25           30
Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
      35           40           45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
 50           55           60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
65           70           75           80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
      85           90           95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
      100          105          110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
      115          120          125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
130          135          140
Asp Pro Ser Arg Phe Pro Asp Leu
145          150

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&lt;210&gt; 3027

&lt;211&gt; 1154

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3027

```

nccgttttcc cgtcgcacgt ggtggccact gttggcttct gaatggtttg caaggcggat
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atccacgcca aggccttttg atcgcccggtg ggtacatccg tctgagccgt tcctttccat
120
cgcagacggc ggctccgcg gcgctctcca gtcattggact accggcgggt tctcatgagc
180
cgggtggtcc ccgggcaatt cgacgacgcg gactcctctg acagtgaaaa cagagacttg
240
aagacagtca aagagaagga tgacattctg tttgaagacc ttcaagacaa tgtgaatgag
300
aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac
360
tgggactggg atgaaggagt tggaaaactc gccaaagggt atgtctggaa tggaggaagc
420
aaccacagg caaatcgaca gacctccgac agcagttcag ccaaaatgtc tactccagca
480
gacaaggtct tacggaaatt tgagaataaa attaathtag ataagctaaa tgttactgat
540
tccgtcataa ataaagtcac cgaaaagtct agacaaaagg aagcagatat gtatcgcac
600
aaagataagg cagacagagc aactgtagaa caggtgttgg atcccagaac aagaatgatt
660
ttattcaaga tgttgactag aggaatcata acagagataa atggctgcat tagcacagga
720
aaagaagcta atgtatacca tgctagcaca gcaaatggag agagcagagc aatcaaaatt
780

```

tataaaactt ctattttggt gttcaaagat cgggataaat atgtaagtgg agaattcaga  
 840  
 tttcgtcatg gctattgtaa aggaaaccct aggaaaatgg tgaaaacttg ggcagaaaaa  
 900  
 gaaatgagga acttaatcag gctaaacaca gcagagatac catgtccaga accaataatg  
 960  
 ctaagaagtc atgttcttgt catgagtttc atcggtaaag atgacatttc ttttcattca  
 1020  
 aggctgcac cactcttgaa aaatgtccag ttatcagaat ccaaggctcg ggagttgtac  
 1080  
 ctgcaggtca ttcagtacat gagaagaatg tatcaggatg ccagacttgt ccatgcagat  
 1140  
 cgtcggtgag aggc  
 1154

<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

Met	Asp	Tyr	Arg	Arg	Leu	Leu	Met	Ser	Arg	Val	Val	Pro	Gly	Gln	Phe
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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
			20					25					30		
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35					40					45			
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Tyr	Asp
	50					55				60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70				75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
			85						90					95	
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
			100					105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115					120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
		130				135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145					150				155					160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170						175	
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
		180					185					190			
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
		195					200					205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
	210					215					220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225					230					235				240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245						250					255	
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

```

                260                265                270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
      275                280                285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
      290                295                300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
305                310                315                320
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg
      325                330

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&lt;210&gt; 3029

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3029

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acgcgtgatg cacggaaggg ccttcggttt ttgcattttc cttatctgct gaccttacag
60
ctgaaaagat tcgattttga ttatacaacc atgcatagga ttaaactgaa tgatcgaatg
120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
240
atgagcaacg atttctccaa tgatgatggg gttgatgaag gaatctgttt tgaaaccaat
300
agtggaactg aaaagatctc aaaatctgga cctgaaaaga attc
344

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&lt;210&gt; 3030

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3030

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Thr Arg Asp Ala Arg Lys Gly Leu Arg Phe Leu His Phe Pro Tyr Leu
1          5          10          15
Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His
      20          25          30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met
      35          40          45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
      50          55          60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
65          70          75          80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
      85          90          95
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
      100          105          110
Lys Asn

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&lt;210&gt; 3031

&lt;211&gt; 567

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3031

gctgaagaag cggaggatca tggacgcac cccgaccctg atgattttgt gccgcctgtg  
 60  
 cctccccctt cctattttgc cacgttttac tctgtcacac cccggatgaa ccgcagattg  
 120  
 gttggtcctg atgttattcc cctgccacac atctacggag ctgcaatcaa aggtgtggaa  
 180  
 gtgttctgtc ctctggatcc cccgccgcca tatgaagctg tggtgagcca gatggaccag  
 240  
 gagcagggat cttcattcca aatgtcagaa ggatcagaag ctgctgtgat ccattggat  
 300  
 ctgggctgca cacaagtgc tcaagatggg gacattccta acatacctgc cgaagaaaat  
 360  
 gcattccact caactcccag ttcaaccctg gtgcgtccta tcagaagccg gagagccctc  
 420  
 ccacccttga ggaccaggtc gaagagtgc cctgtgtctc atccttctga ggagagagct  
 480  
 gccccagtgc tcagctgtga agctgcaaca cagactgaaa ggagactgga tctggctgca  
 540  
 gtgactctga ggagaggctt gagatct  
 567

&lt;210&gt; 3032

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3032

Ala Glu Glu Ala Glu Asp His Gly Arg Ile Pro Asp Pro Asp Asp Phe  
 1 5 10 15  
 Val Pro Pro Val Pro Pro Pro Ser Tyr Phe Ala Thr Phe Tyr Ser Cys  
 20 25 30  
 Thr Pro Arg Met Asn Arg Arg Leu Val Gly Pro Asp Val Ile Pro Leu  
 35 40 45  
 Pro His Ile Tyr Gly Ala Arg Ile Lys Gly Val Glu Val Phe Cys Pro  
 50 55 60  
 Leu Asp Pro Pro Pro Pro Tyr Glu Ala Val Val Ser Gln Met Asp Gln  
 65 70 75 80  
 Glu Gln Gly Ser Ser Phe Gln Met Ser Glu Gly Ser Glu Ala Ala Val  
 85 90 95  
 Ile Pro Leu Asp Leu Gly Cys Thr Gln Val Thr Gln Asp Gly Asp Ile  
 100 105 110  
 Pro Asn Ile Pro Ala Glu Glu Asn Ala Ser Thr Ser Thr Pro Ser Ser  
 115 120 125  
 Thr Leu Val Arg Pro Ile Arg Ser Arg Arg Ala Leu Pro Pro Leu Arg  
 130 135 140  
 Thr Arg Ser Lys Ser Asp Pro Val Leu His Pro Ser Glu Glu Arg Ala  
 145 150 155 160  
 Ala Pro Val Leu Ser Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu  
 165 170 175  
 Asp Leu Ala Ala Val Thr Leu Arg Arg Gly Leu Arg Ser

180

185

<210> 3033  
 <211> 821  
 <212> DNA  
 <213> Homo sapiens

<400> 3033  
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 120  
 tactatgata aattatttaa ggaatactgc atagcagatc tcagtaaata taaagaaaat  
 180  
 aagtttggat ttaggtggcg agtagaaaaa gaagtaattt caggaaaagg tcaatttttc  
 240  
 tgtggaaata aatattgtga taaaaaagaa ggcttaaaga gttgggaagt taattttggt  
 300  
 tatattgagc atggtgagaa gagaaatgca cttgttaaata taaggttatg ccaagaatgt  
 360  
 tccattaaat taaattttcca tcacaggaga aaagaaatca agtcaaaaaa aagaaaagat  
 420  
 aaaacaaaaa aagactgtga agagtcacata cataaaaaat ccagattatc ttctgcagaa  
 480  
 gaggcctcca agaaaaaaga taaaggacat tcatcttcaa agaaatctga agattctcta  
 540  
 cttagaaact ctgatgagga agaaagtgtc tcagaatctg aactttggaa ggggtccacta  
 600  
 ccagagacag atgaaaaatc acaggaagaa gaatttgatg agtattttca ggatttgttt  
 660  
 ctatgagacg agagagagaa gcctccgctc cttaatgtga aacttcatga agttttaaac  
 720  
 ctcatgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagctt ctgtgctttg  
 780  
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 821

<210> 3034  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 3034  
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 20 25 30  
 Trp Glu Lys Arg Leu Ala Lys Lys Tyr Tyr Asp Lys Leu Phe Lys Glu  
 35 40 45  
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe  
 50 55 60  
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe  
 65 70 75 80  
 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu



				85					90					95					
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100					105					110						
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120					125							
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130				135					140								
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145					150					155					160				
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
			165					170					175						
Glu	Asp	Ser	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu					
		180					185				190								
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
	195					200					205								
Glu	Glu	Glu	Phe	Asp	Glu	Tyr	Phe	Gln	Asp	Leu	Phe	Leu							
	210					215					220								

&lt;210&gt; 3035

&lt;211&gt; 878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3035

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120
cctcagacca cgacaggggc ctccacaca cggctcgcag aacctgtgca aggagaacca
180
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240
accctgcaga gtctcactct gtcattcagg gtggagtgc atggcgcaat ctcagctcac
300
tgcaacctcc cactcccggg ctcaagcaat tctcctgacc cacactcagg cccagctcct
360
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420
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480
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540
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660
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720
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780
ccttgcaaaa gttctgcgag ccattgtgtg gaggcccctg tcgtgggtctg aggacgtccc
840
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878

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<210> 3036  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 3036  
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 Glu Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Pro Leu Pro Gly  
 20 25 30  
 Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr  
 35 40 45  
 Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp  
 50 55 60  
 Pro  
 65

<210> 3037  
 <211> 3538  
 <212> DNA  
 <213> Homo sapiens

<400> 3037  
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 ctcaagctca tagtagatgc tttcctacag cagttaccca actgtgtcaa ccgagatctg  
 180  
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 240  
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 300  
 agattgggtg ctacattgca tccctgcatg tctgatgtag cagaggatct ttgttccatg  
 360  
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 420  
 aataaaaactg ttcgttttat aggagaacta actaagtta agatgttcac caaaaatgac  
 480  
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 tgcaccctgc tggagacatg tggacggttt cttttcagat ctccagaatc tcacctgagg  
 600  
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 660  
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 720  
 gtgaaaaaga aacgtcctcc tctccaggaa tatgtccgga aacttttgta caaggatctc  
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 840  
 gaagtgaag actatgttat ttgttgatg ataaacatct ggaatgtgaa atataatagt  
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attcattgtg tagccaacct cttagcagga ctagtgctct accaagagga tgttgggac  
960  
cacgttgtgg atggagtgtt agaagatatt cgattaggaa tggagggttaa tcaacctaaa  
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1080  
gtggaatcag ctgttatattt cagaactctg tattctttta cctcatttgg tgttaatcct  
1140  
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1200  
actattctgg acacatgtgg ccagtacttt gacagagggt ccagtaaacg aaaacttgat  
1260  
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&lt;210&gt; 3038

&lt;211&gt; 697

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3038

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		20					25						30		
Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
		35				40					45				
Arg	Leu	Val	Ala	Thr	Leu	His	Pro	Cys	Met	Ser	Asp	Val	Ala	Glu	Asp
	50				55					60					
Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
65			70					75					80		
Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
		85					90				95				
Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

			100					105					110		
Leu	Lys	Met	Leu	Leu	Ser	Asp	Phe	Ser	His	His	His	Ile	Glu	Met	Ala
		115					120					125			
Cys	Thr	Leu	Leu	Glu	Thr	Cys	Gly	Arg	Phe	Leu	Phe	Arg	Ser	Pro	Glu
		130				135					140				
Ser	His	Leu	Arg	Thr	Ser	Val	Leu	Leu	Glu	Gln	Met	Met	Arg	Lys	Lys
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Gln	Ala	Met	His	Leu	Asp	Ala	Arg	Tyr	Val	Thr	Met	Val	Glu	Asn	Ala
				165				170						175	
Tyr	Tyr	Tyr	Cys	Asn	Pro	Pro	Pro	Ala	Glu	Lys	Thr	Val	Lys	Lys	Lys
			180					185					190		
Arg	Pro	Pro	Leu	Gln	Glu	Tyr	Val	Arg	Lys	Leu	Leu	Tyr	Lys	Asp	Leu
		195				200					205				
Ser	Lys	Val	Thr	Thr	Glu	Lys	Val	Leu	Arg	Gln	Met	Arg	Lys	Leu	Pro
		210				215					220				
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225					230					235				240	
Ile	Trp	Asn	Val	Lys	Tyr	Asn	Ser	Ile	His	Cys	Val	Ala	Asn	Leu	Leu
				245				250						255	
Ala	Gly	Leu	Val	Leu	Tyr	Gln	Glu	Asp	Val	Gly	Ile	His	Val	Val	Asp
			260					265					270		
Gly	Val	Leu	Glu	Asp	Ile	Arg	Leu	Gly	Met	Glu	Val	Asn	Gln	Pro	Lys
		275				280					285				
Phe	Asn	Gln	Arg	Arg	Ile	Ser	Ser	Ala	Lys	Phe	Leu	Gly	Glu	Leu	Tyr
		290				295					300				
Asn	Tyr	Arg	Met	Val	Glu	Ser	Ala	Val	Ile	Phe	Arg	Thr	Leu	Tyr	Ser
305					310					315				320	
Phe	Thr	Ser	Phe	Gly	Val	Asn	Pro	Asp	Gly	Ser	Pro	Ser	Ser	Leu	Asp
				325				330						335	
Pro	Pro	Glu	His	Leu	Phe	Arg	Ile	Arg	Leu	Val	Cys	Thr	Ile	Leu	Asp
			340					345					350		
Thr	Cys	Gly	Gln	Tyr	Phe	Asp	Arg	Gly	Ser	Ser	Lys	Arg	Lys	Leu	Asp
		355				360					365				
Cys	Phe	Leu	Val	Tyr	Phe	Gln	Arg	Tyr	Val	Trp	Trp	Lys	Lys	Ser	Leu
		370				375					380				
Glu	Val	Trp	Thr	Lys	Asp	His	Pro	Phe	Pro	Ile	Asp	Ile	Asp	Tyr	Met
385					390					395				400	
Ile	Ser	Asp	Thr	Leu	Glu	Leu	Leu	Arg	Pro	Lys	Ile	Lys	Leu	Cys	Asn
				405				410						415	
Ser	Leu	Glu	Glu	Ser	Ile	Arg	Gln	Val	Gln	Asp	Leu	Glu	Arg	Glu	Phe
			420					425					430		
Leu	Ile	Lys	Leu	Gly	Leu	Val	Asn	Asp	Lys	Asp	Ser	Lys	Asp	Phe	Met
		435				440					445				
Thr	Glu	Gly	Glu	Asn	Leu	Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly
		450													

530	535	540
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545	550	555
His Gln Leu Asp Val	Ala Ile Pro Leu His	Leu Lys Ser Gln Leu Arg
565	570	575
Lys Gly Pro Pro Leu	Gly Gly Gly Glu Gly	Glu Ala Glu Ser Ala Asp
580	585	590
Thr Met Pro Phe Val	Met Leu Thr Arg Lys	Gly Asn Lys Gln Gln Phe
595	600	605
Lys Ile Leu Asn Val	Pro Met Ser Ser Gln	Leu Ala Ala Asn His Trp
610	615	620
Asn Gln Gln Gln Ala	Glu Gln Glu Glu Arg	Met Arg Met Lys Lys Leu
625	630	635
Thr Leu Asp Ile Asn	Glu Arg Gln Glu Gln	Glu Asp Tyr Gln Glu Met
645	650	655
Leu Gln Ser Leu Ala	Gln Arg Pro Ala Pro	Ala Asn Thr Asn Arg Glu
660	665	670
Arg Arg Pro Arg Tyr	Gln His Pro Lys Gly	Ala Pro Asn Ala Asp Leu
675	680	685
Ile Phe Lys Thr Gly	Gly Arg Arg Arg	
690	695	

&lt;210&gt; 3039

&lt;211&gt; 1836

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3039

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 1836

<210> 3040

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

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Leu	Pro	Asp	Thr	Ala	Thr	Gly	Leu	Asp	Trp	Thr	His	Leu	Val	Asp	Ala
			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
		35				40					45				
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50					55				60					
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65					70					75				80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

	85		90		95
Leu Arg Gln	Leu Gln Thr Asp Leu Arg	Lys Glu Lys Gln Asp	Lys Ala		
	100		105		110
Gly Leu Gln	Ala Glu Val Gln His Leu Arg	Gln Asp Asn Met Arg	Leu		
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Gln Glu Glu	Ser Gln Thr Ala Thr Ala Gln	Leu Arg Lys Leu			
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 <211> 1512  
 <212> DNA  
 <213> Homo sapiens

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<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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Leu	Thr	Leu	Ser	Thr	Pro	Lys	Pro	Leu	Val	Asp	Phe	Cys	Asn	Lys	Pro
		20						25					30		
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His
		35					40					45			
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
	50					55				60					
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
65					70				75					80	
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
			85					90					95		
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile
		100					105						110		
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
		115				120					125				
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
		130				135				140					
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val
145					150				155					160	
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr
			165					170					175		
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser
		180					185						190		
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr
		195				200					205				
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp
		210				215					220				
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln
225				230					235					240	
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val
			245					250					255		
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val
		260					265					270			
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg

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 Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu  
 290                      295                      300  
 Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met  
 305                      310                      315                      320  
 Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu  
 325                      330                      335  
 Tyr Leu Asn Gly Ala Ser Val Leu Pro His Lys Ser Ile Gly Glu Ser  
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<210> 3043

<211> 394

<212> DNA

<213> Homo sapiens

<400> 3043

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 240  
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 300  
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<210> 3044

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3044

Met Lys Pro Leu Leu Thr Ser Trp Gly Tyr Gln Glu Tyr Asp Pro Pro  
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 Gln Pro Arg Gly Lys Gly Asn Cys Leu Leu Cys Leu Arg Val Pro Lys  
 20                      25                      30  
 Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe  
 35                      40                      45  
 Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys  
 50                      55                      60  
 Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu  
 65                      70                      75                      80  
 Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr  
 85                      90                      95  
 Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser  
 100                      105                      110  
 Lys Glu Ile

115

<210> 3045  
 <211> 605  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 240  
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 420  
 agtgaggatc ttgacagtga tggcattgtg gccacttcc ctgcccata gaagccagt  
 480  
 tgctgcatgg cttttaatac aagtggatg cttctagtca caacagacac ccttggccat  
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 605

<210> 3046  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 3046  
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 1 5 10 15  
 Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys  
 20 25 30  
 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr  
 35 40 45  
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser  
 50 55 60  
 Ser Ser Thr Glu Arg Arg Gln Arg  
 65 70

<210> 3047  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 3047

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 120  
 ttggttgagt caggaattca gtttatggat gagccagaaa tggcagtgtt tctgcagaat  
 180  
 gccaaaaccc tgctaaaaaa aatctcggaa gcatcaaagg catttcagat ggagaaaata  
 240  
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata  
 300  
 atacgtgaaa tfgactttta cagagaagat gaagatgaag aagaagaaga aggcggagaa  
 360  
 ggagaaaaag aagagaagga gaagtgggag a  
 391

&lt;210&gt; 3048

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3048

Met	Thr	Gln	Val	Ile	Thr	Arg	Thr	Gln	Glu	Glu	Lys	Leu	Glu	His	Val
1				5				10						15	
Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser	Lys
			20					25					30		
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
			35				40					45			
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
			50			55					60				
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
65				70						75				80	
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
			85							90				95	
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	Glu
			100					105					110		
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
			115				120								

&lt;210&gt; 3049

&lt;211&gt; 599

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3049

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 60  
 tttcagatgt tctgtgttcg ccgggacagc agctcgaagc agctggtgct ctgtgtccac  
 120  
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 180  
 tcgatattgt acctggaagg ctcggtcttt gtgtttgagg acatcttcag attgattggc  
 240  
 ttctactgtg tcagtagaga cttactgccc ttcactgc ggctacccca ggccatcctt  
 300

gaggccagca gcttcacgga ccttgagacc atcgccaacc tgggtctggg tttctgggac  
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 420  
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 480  
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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

Met	Phe	Leu	Val	Arg	Arg	Asp	Ser	Ser	Ser	Lys	Gln	Leu	Val	Leu	Cys
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Val	His	Phe	Pro	Ser	Leu	Asn	Glu	Ser	Ser	Ala	Glu	Val	Leu	Glu	Tyr
			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
		50				55					60				
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70				75					80	
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
			85					90					95		
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115					120					125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135						140			
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145					150				155					160	
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ser
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Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 120  
 tgaagactct caggttacca gcacaatat cccctacat tctcctcaca agggactccc  
 180

tcctcggcca ccgtcgaca acaggcctcc tcctccccag tcctggagg gactccgaca  
 240  
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 300  
 agtcctcttt agatgaaccc tatgagaagg tcaagaagcg ctctctcac agccattcca  
 360  
 gcagccacaa gcgcttcccc agcacaggaa gctgtgcgga agccggcgga ggaagcaact  
 420  
 ccttgcagaa cagccccatc cgcggcctcc cgcactggaa ctcccagtc agcatgccgt  
 480  
 ccacgccaga cctgcgggtc cggagtcccc actacgtcca ttccacgagg tcggtggaca  
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 600  
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 660  
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 720  
 actcgagctc ggagcactac taccggcgc agatgaacgc caactactcc acgctggccg  
 780  
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 820

<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

Arg	Leu	Ser	Gly	Tyr	Gln	His	Asn	Ile	Pro	Pro	Thr	Phe	Ser	Ser	Gln
1				5					10					15	
Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
			20					25					30		
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
		35					40					45			
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
	50					55						60			

<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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 120  
 cagtttaaaa gatttagaga aactgtacca acttgggata caataagaga tgaagaagat  
 180  
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 ggaatctcac ttaatatccc tgctccacaa cctgtgtgca tttctgaaaa acaagaaaat  
 300

gatgttatta atgctatcct taagcaacat acagaagaaa aagaatttgt tgagaagcac  
360  
tttaatgact taaacatgaa agctgtggaa caagatgaac caatacctca aaaacctcag  
420  
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480  
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540  
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600  
gaagacaaac actccattct caccaatata ggaggaagtc aagcatatga agattttgta  
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720  
aaaaacaaaa gacttggtt gaccactcca tattttgcta cctctacagt agaggtaata  
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960  
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1080  
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1140  
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1200  
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1260  
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1800  
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1860  
acagcaaaag atgtacctgt taatacacag aatgtgtaca gattatttgt tatgacaata  
1920

aaacactcaa aataaatggt ctttagcatc tcaaattcca actgaaatca ttttagtatt  
 1980  
 aactcttctt cccaaagcaa tgtctcatctt cttggctgtg caggtgatgc catgttatat  
 2040  
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 2160  
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 2460  
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 2520  
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 2580  
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<210> 3054

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

Ser	Gly	Xaa	Ser	Glu	His	Thr	Ser	Xaa	Met	Leu	Ser	Leu	Ser	His	Gln
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			20					25					30		
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
		35					40					45			
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
	50					55					60				
Leu	Leu	Gln	Tyr	Leu	Gly	Val	Thr	Ser	Pro	Glu	Cys	Leu	Gln	Arg	Thr
65				70					75					80	
Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
			85					90						95	
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
			100					105					110		
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
	115					120						125			
Val	Glu	Gln	Asp	Glu	Pro	Ile	Pro	Gln	Lys	Pro	Gln	Ser	Ala	Phe	Tyr
	130					135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
145				150					155					160	
Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
			165					170						175	
Leu	Arg	Asn	Leu	Asp	Ser	Arg	Gln	Cys	Arg	Glu	Thr	His	Lys	Ile	Ala



180								185				190					
Val	Phe	Tyr	Val	Ala	Glu	Gly	Gln	Glu	Asp	Lys	His	Ser	Ile	Leu	Thr		
195			200					205									
Asn	Thr	Gly	Gly	Ser	Gln	Ala	Tyr	Glu	Asp	Phe	Val	Ala	Gly	Leu	Gly		
210			215					220									
Trp	Glu	Val	Asn	Leu	Thr	Asn	His	Cys	Gly	Phe	Met	Gly	Gly	Leu	Gln		
225			230					235					240				
Lys	Asn	Lys	Ser	Thr	Gly	Leu	Thr	Thr	Pro	Tyr	Phe	Ala	Thr	Ser	Thr		
			245					250					255				
Val	Glu	Val	Ile	Phe	His	Val	Ser	Thr	Arg	Met	Pro	Ser	Asp	Ser	Asp		
			260					265					270				
Asp	Ser	Leu	Thr	Lys	Lys	Leu	Arg	His	Leu	Gly	Asn	Asp	Glu	Val	His		
275			280					285									
Ile	Val	Trp	Ser	Glu	His	Thr	Arg	Asp	Tyr	Arg	Arg	Gly	Ile	Ile	Pro		
290			295					300									
Thr	Glu	Phe	Gly	Asp	Val	Leu	Ile	Val	Ile	Tyr	Pro	Met	Lys	Asn	His		
305			310					315					320				
Met	Phe	Ser	Ile	Gln	Ile	Met	Lys	Lys	Pro	Glu	Val	Pro	Phe	Phe	Gly		
			325					330					335				
Pro	Leu	Phe	Asp	Gly	Ala	Ile	Val	Asn	Gly	Lys	Val	Leu	Pro	Ile	Met		
			340					345					350				
Val	Arg	Ala	Thr	Ala	Ile	Asn	Ala	Ser	Arg	Ala	Leu	Lys	Ser	Leu	Ile		
355			360					365									
Pro	Leu	Tyr	Gln	Asn	Phe	Tyr	Glu	Glu	Arg	Ala	Arg	Tyr	Leu	Gln	Thr		
370			375					380									
Ile	Val	Gln	His	His	Leu	Glu	Pro	Thr	Thr	Phe	Glu	Asp	Phe	Ala	Ala		
385			390					395					400				
Gln	Val	Phe	Ser	Pro	Ala	Pro	Tyr	His	His	Leu	Pro	Ser	Asp	Ala	Asp		
			405					410					415				
His																	

<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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120

tcactgtaac tacgtgtccg ggaaacatgc ctgcatattc tacgatgaga ataccaaaca

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ttatgaqctg ttaaactaca gtgagcatgg gacaacggtg gacaatgtgc tgtattcatg

240

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300

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360

gatatgattcc caagcccaag ggccgcagcg gagaccctgc aattgcaaag ccagcagctc

420

gaqcttgatt gggggcagtg gggccggctg ggaggggcaca gccttactgc accatggcag

480

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 900  
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 905

&lt;210&gt; 3056

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3056

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 Cys Leu Thr Asn Tyr Gly His Cys Asn Tyr Val Ser Gly Lys His Ala  
 20 25 30  
 Cys Ile Phe Tyr Asp Glu Asn Thr Lys His Tyr Glu Leu Leu Asn Tyr  
 35 40 45  
 Ser Glu His Gly Thr Thr Val Asp Asn Val Leu Tyr Ser Cys Asp Phe  
 50 55 60  
 Ser Glu Lys Thr Pro Pro Thr Pro Pro Ser Ser Ile Val Ala Lys Val  
 65 70 75 80  
 Gln Ser Val Ile Arg Arg Arg Arg His Gln Lys Gln Asp Glu Glu Pro  
 85 90 95  
 Ser Glu Glu Ala Ala Met Met Ser Ser Gln Ala Gln Gly Pro Gln Arg  
 100 105 110  
 Arg Pro Cys Asn Cys Lys Ala Ser Ser Ser Ser Leu Ile Gly Gly Ser  
 115 120 125  
 Gly Ala Gly Trp Glu Gly Thr Ala Leu Leu His His Gly Ser Tyr Ile  
 130 135 140  
 Lys Leu Gly Cys Leu Gln Phe Val Phe Ser Ile Thr Glu Phe Ala Thr  
 145 150 155 160  
 Lys Gln Pro Lys Gly Asp Ala Ser Leu Leu Gln Asp Gly Val Leu Ala  
 165 170 175  
 Glu Lys Leu Ser Leu Lys Pro His Gln Gly Pro Val Leu Arg Ser Asn  
 180 185 190  
 Ser Val Pro  
 195

&lt;210&gt; 3057

&lt;211&gt; 2169

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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1260  
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1560

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<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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		20						25				30			
Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
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Asn	Thr	Pro	Ala	Leu	Leu	Ala	Pro	Gln	Ala	Gly	Ala	Arg	Glu	Lys	Val
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Ala	Arg	Ser	Trp	Tyr	Cys	Asn	Arg	Gly	Leu	Val	Ser	Leu	Ser	Ala	Lys
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Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
			85					90						95	
Glu	Ile	Asp	Asn	Gly	Ser	Thr	Arg	Pro	Val	Leu	Pro	Arg	Ala	Ala	Val
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Val	Gln	Thr	Gln	Thr	Phe	Met	Ala	Arg	Gly	Ala	Arg	Lys	Gln	Lys	Arg
	115						120					125			
Ala	Val	Val	Ala	Ser	Leu	Ala	Gly	Glu	Pro	Val	Gly	Pro	Gly	Gln	Arg
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			165					170						175	
Val	Asp	Ile	Pro	Gly	Thr	Ser	Lys	Leu	Leu	Glu	Leu	Pro	Leu	Val	
			180					185						190	
Ile	Gly	Thr	Ile	Pro	Leu	His	Pro	Phe	Gly	Ser	Arg	Ser	Ser	Ser	Val

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Gly	Ser	His	Ala	Ser	Phe	Leu	Leu	Asp	Trp	Arg	Leu	Gly	Ala	Leu	Pro
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Glu	Arg	Pro	Glu	Ala	Pro	Pro	Glu	Tyr	Ser	Glu	Val	Val	Ala	Asp	Thr
225					230					235				240	
Glu	Glu	Ala	Ala	Leu	Gly	Gln	Ser	Pro	Phe	Pro	Leu	Pro	Gln	Asp	Pro
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Asp	Met	Ser	Leu	Glu	Gly	Pro	Phe	Phe	Ala	Tyr	Ile	Gln	Glu	Phe	Arg
			260					265					270		
Tyr	Arg	Pro	Pro	Pro	Leu	Tyr	Ser	Glu	Glu	Asp	Pro	Asn	Pro	Leu	Leu
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&lt;210&gt; 3059

&lt;211&gt; 1411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3059

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180
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240
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300
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1020

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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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 Arg Thr Tyr Ser Arg Lys Lys Gly Gly Arg Lys Ser Arg Ser Lys Ser  
 35 40 45  
 Arg Ser Trp Ser Arg Asp Leu Gln Pro Arg Ser His Ser Tyr Asp Arg  
 50 55 60  
 Arg Arg Arg His Arg Ser Ser Ser Ser Ser Tyr Gly Ser Arg Arg  
 65 70 75 80  
 Lys Arg Ser Arg Ser Arg Ser Arg Gly Arg Gly Lys Ser Tyr Arg Val  
 85 90 95  
 Gln Arg Ser Arg Ser Lys Ser Arg Thr Arg Arg Ser Arg Ser Arg Pro  
 100 105 110  
 Arg Leu Arg Ser His Ser Arg Ser Ser Glu Arg Ser Ser His Arg Arg  
 115 120 125  
 Thr Arg Ser Arg Ser Arg Asp Arg Glu Arg Arg Lys Gly Arg Asp Lys  
 130 135 140  
 Glu Lys Arg Glu Lys Glu Lys Asp Lys Gly Lys Asp Lys Glu Leu His  
 145 150 155 160  
 Asn Ile Lys Arg Gly Glu Ser Gly Asn Ile Lys Ala Gly Leu Glu His  
 165 170 175  
 Leu Pro Pro Ala Glu Gln Ala Lys Ala Arg Leu Gln Leu Val Leu Glu  
 180 185 190  
 Ala Ala Ala Lys Ala Asp Glu Ala Leu Lys Ala Lys Glu Arg Asn Glu  
 195 200 205  
 Glu Glu Ala Lys Arg Arg Lys Glu Glu Asp Gln Ala Thr Leu Val Glu  
 210 215 220  
 Gln Val Lys Arg Val Lys Glu Ile Glu Ala Ile Glu Ser Asp Ser Phe  
 225 230 235 240  
 Val Gln Gln Thr Phe Arg Ser Ser Lys Glu Val Lys Lys Ser Val Glu  
 245 250 255  
 Pro Ser Glu Val Lys Gln Ala Thr Ser Thr Ser Gly Pro Ala Ser Ala

	260		265		270										
Val	Ala	Asp	Pro	Pro	Ser	Thr	Glu	Lys	Glu	Ile	Asp	Pro	Thr	Ser	Ile
	275		280		285										
Pro	Thr	Ala	Ile	Lys	Tyr	Gln	Asp	Asp	Asn	Ser	Leu	Ala	His	Pro	Asn
	290		295		300										
Leu	Phe	Ile	Glu	Lys	Ala	Asp	Ala	Glu	Glu	Lys	Trp	Phe	Lys	Arg	Leu
	305		310		315									320	
Ile	Ala	Leu	Arg	Gln	Glu	Arg	Leu	Met	Gly	Ser	Pro	Val	Ala		
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&lt;210&gt; 3061

&lt;211&gt; 1554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3061

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120  
gctccgatat cacagggggc agggatttcc acacgcccat catggtgact aaggtggccg  
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240  
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300  
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420  
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<210> 3062

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3062

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20 25 30  
Ser Ser Ser Phe Arg Leu Leu Gln Glu Ala Leu Glu Ala Glu Glu Arg  
35 40 45  
Gly Gly Thr Pro Ala Phe Leu Pro Ser Ser Leu Ser Pro Gln Ser Ser  
50 55 60  
Leu Pro Ala Ser Arg Ala Leu Ala Thr Pro Pro Lys Leu His Thr Cys  
65 70 75 80  
Glu Lys Cys Ser Thr Ser Ile Ala Asn Gln Ala Val Arg Ile Gln Glu  
85 90 95  
Gly Arg Tyr Arg His Pro Gly Cys Tyr Thr Cys Ala Asp Cys Gly Leu  
100 105 110  
Asn Leu Lys Met Arg Gly His Phe Trp Val Gly Asp Glu Leu Tyr Cys  
115 120 125  
Glu Lys His Ala Arg Gln Arg Tyr Ser Ala Pro Ala Thr Leu Ser Ser  
130 135 140  
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<210> 3063

<211> 386

<212> DNA

<213> Homo sapiens

<400> 3063

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120  
ttacactcca gggatctgca ctccatgata gtggcagctt ttcagtgtct ctgtgtctgg  
180



ctgacagagc accctgatat gcttgatgaa aaggactacc ttaaggaagt actggagatt  
 240  
 gtggaactgg gtatctcagg aagtaagtcc aagaacaatg agcaagaggt caagtacaaa  
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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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		20						25				30			
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
		35					40					45			
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu	His
	50					55				60					
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
65					70					75				80	
Val	Glu	Leu	Gly	Ile	Ser	Gly	Ser	Lys	Ser	Lys	Asn	Asn	Glu	Gln	Glu
			85					90					95		
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
		100						105					110		
Lys	Asp	Ala	Ala	Glu	Ala	Thr	Leu	Thr	Trp	Tyr	Gly	Ser	Asp	Arg	Thr
		115					120						125		

<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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 180  
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 240  
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 300  
 gaccgcatcg agaaggagcg caagcaccag aaggagctgg agctggtgga ggatgtgtgg  
 360  
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1140  
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1260  
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1980  
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2100

tgca  
2104

<210> 3066  
<211> 183  
<212> PRT  
<213> Homo sapiens

<400> 3066  
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Leu Gln Gly Glu His Ser Gln Asn Gly Glu Glu Glu Pro Glu Thr Glu  
35 40 45  
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa  
50 55 60  
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly  
65 70 75 80  
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu  
85 90 95  
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Glu Asn  
100 105 110  
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln  
115 120 125  
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys  
130 135 140  
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe  
145 150 155 160  
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165 170 175  
Gln Glu Ala Leu Gln His Leu  
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<210> 3067  
<211> 645  
<212> DNA  
<213> Homo sapiens

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120  
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240  
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360  
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420

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 540  
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<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

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Pro	Pro	Ala	Ala	Met	Ser	Gly	Ser	Pro	Ala	Pro	Lys	Ala	Gly	Tyr	Ala
		20						25					30		
Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln	Ala
		35					40					45			
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro	Asp
	50					55					60				
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys
65					70					75				80	
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu
			85						90					95	
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly	Trp
		100						105					110		
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro	Ser
	115						120					125			
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro	Tyr
	130					135				140					
Pro	Pro	Pro	Gly	Ala	Gly	Arg	Gly	Ser	Glu	His	Arg	Ser	Ala	Pro	Gly
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			165					170					175		
Ser	Pro	Ala	Glu	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr	Pro
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<210> 3069

<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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1561

&lt;210&gt; 3070

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3070

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Met His Leu Lys Asp Leu Gly Leu Asn Phe His Val Ser Val Leu Gly
 1           5           10          15
Glu Thr Phe Thr Asp Val Pro Asp Ile Phe Ser Glu Ala Lys Lys Ala
          20          25          30
Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp
          35          40          45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
          50          55          60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65          70          75          80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
          85          90          95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
          100         105         110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
          115         120         125
Ile Ala Pro Phe Ser Trp Ala Ala Leu His Gly Lys Phe Arg Ser Leu
          130         135         140
Leu Thr Thr Glu Pro Arg Glu Asp Leu
145          150

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&lt;210&gt; 3071

&lt;211&gt; 3343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3071

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780

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 3343

&lt;210&gt; 3072

&lt;211&gt; 349

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3072

Met	Leu	Glu	Arg	Arg	Cys	Arg	Gly	Pro	Leu	Ala	Met	Gly	Leu	Ala	Gln
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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
		20					25					30			
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
		35					40				45				
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
		50				55				60					
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65					70				75					80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
			85					90					95		
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100					105					110		
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp



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Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro
  130      135      140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu
  145      150      155      160
Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro
      165      170      175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu
      180      185      190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala
      195      200      205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala
      210      215      220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys
  225      230      235      240
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg
      245      250      255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg
      260      265      270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly
      275      280      285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys
      290      295      300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly
  305      310      315      320
Arg Pro Arg Pro Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala
      325      330      335
Pro Arg Ser Pro Arg Pro Ser Pro Pro Arg Arg Tyr Leu
      340      345

```

&lt;210&gt; 3073

&lt;211&gt; 791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3073

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420
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540

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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 Ser Cys Glu Phe Leu Leu Ala Gly Ala Gly Gly Ala Gly Ala Gly Ala  
 35 40 45  
 Ala Pro Gly Pro His Leu Pro Pro Arg Gly Ser Val Pro Gly Asp Pro  
 50 55 60  
 Val Arg Ile His Cys Asn Ile Thr Glu Ser Tyr Pro Ala Val Pro Pro  
 65 70 75 80  
 Ile Trp Ser Val Glu Ser Asp Asp Pro Asn Leu Ala Ala Val Leu Glu  
 85 90 95  
 Arg Leu Val Asp Ile Lys Lys Gly Asn Thr Leu Leu Leu Gln His Leu  
 100 105 110  
 Lys Arg Ile Ile Ser Asp Leu Cys Lys Leu Tyr Asn Leu Pro Gln His  
 115 120 125  
 Pro Asp Val Glu Met Leu Asp Gln Pro Leu Pro Ala Glu Gln Cys Thr  
 130 135 140  
 Gln Glu Asp Val Ser Ser Glu Asp Glu Asp Glu Glu Met Pro Glu Asp  
 145 150 155 160  
 Thr Glu Asp Leu Asp His Tyr Glu Met Lys Glu Glu Glu Pro Ala Glu  
 165 170 175  
 Gly Lys Lys Ser Glu Asp Asp Gly Ile Gly Lys Glu Asn Leu Ala Ile  
 180 185 190  
 Leu Glu Lys Ile Lys Lys Asn Gln Arg Gln Asp Tyr Leu Asn Gly Ala  
 195 200 205  
 Val Ser Gly Ser Val Gln Ala Thr Asp Arg Leu Met Lys Glu Leu Gln  
 210 215 220  
 Gly Tyr Ile Thr Xaa Ser Gln Ser Phe Lys Gly Gly Asn Tyr Xaa Ser  
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 Ser Asn Ser Trp Asn Asp Ser Leu Tyr Gly Trp Asp Val Gln Leu Leu  
 245 250 255  
 Lys Val Asp Gln Gly Ser Val  
 260

<210> 3075

<211> 603

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3075

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600
ccg
603

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&lt;210&gt; 3076

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3076

```

Pro Leu Gly Gly Lys Asn Phe Leu Lys Lys Met Val Gly Lys Asn Pro
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Pro Pro Pro Pro Pro Phe Phe Ser Pro Val Gly Ala Lys Lys Lys Asn
20      25      30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35      40      45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50      55      60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65      70      75      80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85      90      95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100     105     110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115     120     125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130     135     140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145     150     155     160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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<210> 3078  
 <211> 310  
 <212> PRT  
 <213> Homo sapiens

<400> 3078  
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 Val Gly Ala Leu Pro Arg Gly Pro Arg Gln Asn Ser Arg Leu Gly Leu  
 35 40 45  
 Pro Leu Leu Leu Met Pro Glu Glu Ala Arg Leu Leu Ala Glu Ile Gly  
 50 55 60  
 Ala Val Thr Leu Val Ser Ala Pro Arg Pro Asp Ser Arg His His Ser  
 65 70 75 80  
 Leu Ala Leu Thr Ser Phe Lys Arg Gln Gln Glu Glu Ser Phe Gln Glu  
 85 90 95  
 Gln Ser Ala Leu Ala Ala Glu Ala Arg Glu Thr Arg Arg Gln Glu Leu  
 100 105 110  
 Leu Glu Lys Ile Thr Glu Gly Gln Ala Ala Lys Lys Gln Lys Leu Glu  
 115 120 125  
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 130 135 140  
 Ala Lys Glu Asp Glu Thr Ser Asp Gly Gln Ala Ser Gly Glu Gln Glu  
 145 150 155 160  
 Glu Ala Gly Pro Ser Ser Ser Gln Ala Gly Pro Ser Asn Gly Val Ala  
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 Pro Leu Pro Arg Ser Ala Leu Leu Val Gln Leu Ala Thr Ala Arg Pro  
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 Arg Pro Val Lys Ala Arg Pro Leu Asp Trp Arg Val Gln Ser Lys Asp  
 195 200 205  
 Trp Pro His Ala Gly Arg Pro Ala His Glu Leu Arg Tyr Ser Ile Tyr  
 210 215 220  
 Arg Asp Leu Trp Glu Arg Gly Phe Phe Leu Ser Ala Ala Gly Lys Phe  
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 His Tyr Ile Ala Gln Cys Trp Ala Pro Glu Asp Thr Ile Pro Leu Gln  
 260 265 270  
 Asp Leu Val Ala Ala Gly Arg Leu Gly Thr Ser Val Arg Lys Thr Leu  
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<210> 3079  
 <211> 1785

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3079

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<212> PRT
<213> Homo sapiens
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2297

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 Pro Leu Asp Thr Thr Glu Gln Leu Pro Asp Leu Cys Val Asn Leu Leu  
                     325                      330                      335  
 Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met  
                     340                      345                      350  
 Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu  
                     355                      360                      365  
 Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His  
                     370                      375                      380  
 Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe  
 385                      390                      395                      400  
 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala  
                     405                      410                      415  
 Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp  
                     420                      425                      430  
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg  
                     435                      440                      445  
 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu  
                     450                      455                      460  
 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro  
 465                      470                      475                      480  
 Arg Pro Leu His Pro Ala Leu Gln Leu Val Ile Asp Ser Ala Phe Gly  
                     485                      490                      495  
 Gly Arg Ser Val  
                     500

&lt;210&gt; 3081

&lt;211&gt; 1902

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3081

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 240  
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 1860  
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 1902

&lt;210&gt; 3082

&lt;211&gt; 414

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3082

Met Asp Asp Met Gly Leu Val Ala Lys Ala Cys Gly Cys Pro Leu Tyr  
 1 5 10 15  
 Trp Lys Gly Pro Leu Phe Tyr Gly Ala Gly Gly Glu Arg Thr Gly Ser

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      20      25      30
Val Ser Val His Lys Phe Val Ala Met Trp Arg Lys Ile Leu Gln Asn
      35      40      45
Cys His Asp Asp Ala Ala Lys Phe Val His Leu Leu Met Ser Pro Gly
      50      55      60
Cys Asn Tyr Leu Val Gln Glu Asp Phe Val Pro Phe Leu Gln Asp Val
      65      70      75      80
Val Asn Thr His Pro Gly Leu Ser Phe Leu Lys Glu Ala Ser Glu Phe
      85      90      95
His Ser Arg Tyr Ile Thr Thr Val Ile Gln Arg Ile Phe Tyr Ala Val
      100      105      110
Asn Arg Ser Trp Ser Gly Arg Ile Thr Cys Ala Glu Leu Arg Arg Ser
      115      120      125
Ser Phe Leu Gln Asn Val Ala Leu Leu Glu Glu Glu Ala Asp Ile Asn
      130      135      140
Gln Leu Thr Glu Phe Phe Ser Tyr Glu His Phe Tyr Val Ile Tyr Cys
      145      150      155      160
Lys Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala Asp
      165      170      175
Asp Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met Ile Asp
      180      185      190
Arg Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val Gln Lys Glu
      195      200      205
Gly Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu Ile Ser Glu Glu
      210      215      220
Asp Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp Phe Arg Cys Met Asp
      225      230      235      240
Leu Asp Gly Asp Gly Ala Leu Ser Met Phe Glu Leu Glu Tyr Phe Tyr
      245      250      255
Glu Glu Gln Cys Arg Arg Leu Asp Ser Met Ala Ile Glu Ala Leu Pro
      260      265      270
Phe Gln Asp Cys Leu Cys Gln Met Leu Asp Leu Val Lys Pro Arg Thr
      275      280      285
Glu Gly Lys Ile Thr Leu Gln Asp Leu Lys Arg Cys Lys Leu Ala Asn
      290      295      300
Val Phe Phe Asp Thr Phe Phe Asn Ile Glu Lys Tyr Leu Asp His Glu
      305      310      315      320
Gln Lys Glu Gln Ile Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro
      325      330      335
Glu Leu Ser Asp Trp Glu Lys Tyr Ala Ala Glu Glu Tyr Asp Ile Leu
      340      345      350
Val Ala Glu Glu Thr Val Gly Glu Pro Trp Glu Asp Gly Phe Glu Ala
      355      360      365
Glu Leu Ser Pro Val Glu Gln Lys Leu Ser Ala Leu Arg Ser Pro Leu
      370      375      380
Ala Gln Arg Pro Phe Phe Glu Ala Pro Ser Pro Leu Gly Ala Val Asp
      385      390      395      400
Leu Tyr Glu Tyr Ala Cys Gly Asp Glu Asp Leu Glu Pro Leu
      405      410

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&lt;210&gt; 3083

&lt;211&gt; 610

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3083

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 180  
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 300  
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 610

&lt;210&gt; 3084

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3084

Xaa	Arg	Pro	Ser	Cys	Trp	Glu	Pro	Val	Arg	Pro	Ser	Gly	Ser	Ser	His
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Leu	Ser	Trp	His	Arg	Gly	Pro	Pro	Cys	Glu	Val	Tyr	Ile	Ala	Val	Leu
			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
			35				40				45				
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
		50				55				60					
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65					70					75				80	
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
			85						90					95	
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
			100						105				110		
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
			115					120					125		
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
			130				135						140		

&lt;210&gt; 3085

&lt;211&gt; 1080

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 120  
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 300  
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 360  
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 420  
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 720  
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 780  
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 1080

<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

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 Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu  
 35 40 45  
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 50 55

<210> 3087  
<211> 2329  
<212> DNA  
<213> Homo sapiens

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480  
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540  
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600  
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660  
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720  
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780  
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840  
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900  
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960  
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1020  
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1080  
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1140  
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1380  
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 2329

&lt;210&gt; 3088

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3088

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Lys	Lys	Arg	Lys	Arg	Glu	Arg	Glu	His	Cys	Asp	Thr	Glu	Gly	Glu	Ala
			20					25					30		
Asp	Asp	Phe	Asp	Pro	Gly	Lys	Lys	Val	Glu	Val	Glu	Pro	Pro	Pro	Asp
		35					40				45				
Arg	Pro	Val	Arg	Ala	Cys	Arg	Thr	Gln	Gln	Pro	Glu	Met	Glu	Arg	Thr
		50				55				60					
His	Ile	Gln	Gln	Leu	Leu	Glu	His	Phe	Leu	Arg	Gln	Leu	Gln	Arg	Lys
65				70					75					80	
Asp	Pro	His	Gly	Phe	Phe	Ala	Phe	Pro	Val	Thr	Asp	Ala	Ile	Ala	Pro
			85					90					95		
Gly	Tyr	Ser	Met	Ile	Ile	Lys	His	Pro	Met	Asp	Phe	Gly	Thr	Met	Lys
			100				105						110		
Asp	Lys	Ile	Val	Ala	Asn	Glu	Tyr	Lys	Ser	Val	Thr	Glu	Phe	Lys	Ala
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Asp	Phe	Lys	Leu	Met	Cys	Asp	Asn	Ala	Met	Thr	Tyr	Asn	Arg	Pro	Asp

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145	150	155
Met Met Ser Lys Gln Ala Ala Leu Leu Gly Asn Glu Asp Thr Ala Val		160
	165	170
Glu Glu Pro Val Pro Glu Val Val Pro Val Gln Val Glu Thr Ala Lys		175
	180	185
Lys Ser Lys Lys Pro Ser Arg Glu Val Ile Ser Cys Met Phe Glu Pro		190
	195	200
Glu Gly Asn Ala Cys Ser Leu Thr Asp Ser Thr Ala Glu Glu His Val		205
	210	215
Leu Ala Leu Val Glu His Ala Ala Asp Glu Ala Arg Asp Arg Ile Asn		220
225	230	235
Arg Phe Leu Pro Gly Gly Lys Met Gly Tyr Leu Lys Arg Asn Gly Asp		240
	245	250
Gly Ser Leu Leu Tyr Ser Val Val Asn Thr Ala Glu Pro Asn Ala Asp		255
	260	265
Glu Glu Glu Thr His Pro Val Thr		270
275	280	

&lt;210&gt; 3089

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3089

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722

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&lt;210&gt; 3090

<211> 240  
 <212> PRT  
 <213> Homo sapiens

<400> 3090  
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 Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr  
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 Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly  
 35 40 45  
 Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser  
 50 55 60  
 Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly  
 65 70 75 80  
 Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys  
 85 90 95  
 Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu  
 100 105 110  
 Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Phe Leu Ser  
 115 120 125  
 Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn  
 130 135 140  
 Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met  
 145 150 155 160  
 Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His  
 165 170 175  
 Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val  
 180 185 190  
 Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser  
 195 200 205  
 Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu  
 210 215 220  
 Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val  
 225 230 235 240

<210> 3091  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

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 ctctttgact ccattctcttg gttccctctt tctgctgcca gctccccga ctcttccctg  
 240  
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<210> 3092  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 3092  
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 20 25 30  
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 35 40 45  
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly  
 50 55 60  
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln  
 65 70 75 80  
 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser  
 85 90 95  
 Phe Pro Ser Ala Pro Phe Thr Arg  
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<210> 3093  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 360  
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 420  
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 480  
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 540  
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<210> 3094

<211> 179  
 <212> PRT  
 <213> Homo sapiens

<400> 3094  
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 20 25 30  
 Leu Asp Ile Ser Gln Leu Gln Pro Leu Pro Asp Gln Val Val Ile  
 35 40 45  
 Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe  
 50 55 60  
 Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly  
 65 70 75 80  
 Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu  
 85 90 95  
 Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr  
 100 105 110  
 Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr  
 115 120 125  
 Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile  
 130 135 140  
 Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu  
 145 150 155 160  
 Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg  
 165 170 175  
 Lys Gly Pro

<210> 3095  
 <211> 519  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ggggtttgacg aggtctttgt catcagcctg gctcgcaggc ctgaccgtcg ggaacgcatg  
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 360  
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 420  
 cgcccagccc ctgctcgctg ccctaccca ctatgccggg gacgccgagt ggctcagtga  
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<210> 3096  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 3096  
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                   20                  25                  30  
 Pro Ser Lys Arg Pro Ser Lys Ile Gly Phe Asp Glu Val Phe Val Ile  
           35                  40                  45  
 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu  
   50                  55                  60  
 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp  
 65                  70                  75                  80  
 Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro  
                   85                  90                  95  
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val  
                   100                  105                  110  
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln  
           115                  120                  125  
 Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro  
   130                  135                  140  
 Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Arg Val Ala Gln  
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<210> 3097  
 <211> 4953  
 <212> DNA  
 <213> Homo sapiens

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 360  
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 420  
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 4953

<210> 3098

<211> 1359

<212> PRT

<213> Homo sapiens

<400> 3098

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		20					25					30			
Gly	Pro	Ser	Arg	Gly	Ser	Gly	Gly	Gly	Arg	Gly	Gly	Leu	Arg	Ala	
		35				40				45					
Asp	Gly	Arg	Ala	Pro	Gly	Leu	Arg	Gly	Leu	Gly	Ala	Ala	Pro	His	Cys
	50				55			60							
Pro	Ala	Gly	Leu	Gly	Pro	Gly	Ala	Met	Ser	Gly	Gly	Gly	Gly	Gly	Gly

65                                      70                                      75                                      80  
 Gly Ser Ala Pro Ser Arg Phe Ala Asp Tyr Phe Val Ile Cys Gly Leu  
    85                                      90                                      95  
 Asp Thr Glu Thr Gly Leu Glu Pro Asp Glu Leu Ser Ala Leu Cys Gln  
    100                                      105                                      110  
 Tyr Ile Gln Ala Ser Lys Ala Arg Asp Gly Ala Ser Pro Phe Ile Ser  
    115                                      120                                      125  
 Ser Thr Thr Glu Gly Glu Asn Phe Glu Gln Thr Pro Leu Arg Arg Thr  
    130                                      135                                      140  
 Phe Lys Ser Lys Val Leu Ala Arg Tyr Pro Glu Asn Val Glu Trp Asn  
 145                                      150                                      155                                      160  
 Pro Phe Asp Gln Asp Ala Val Gly Met Leu Cys Met Pro Lys Gly Leu  
    165                                      170                                      175  
 Ala Phe Lys Thr Gln Ala Asp Pro Arg Glu Pro Gln Phe His Ala Phe  
    180                                      185                                      190  
 Ile Ile Thr Arg Glu Asp Gly Ser Arg Thr Phe Gly Phe Ala Leu Thr  
    195                                      200                                      205  
 Phe Tyr Glu Glu Val Thr Ser Lys Gln Ile Cys Ser Ala Met Gln Thr  
    210                                      215                                      220  
 Leu Tyr His Met His Asn Ala Glu Tyr Asp Val Leu His Ala Pro Pro  
 225                                      230                                      235                                      240  
 Ala Asp Asp Arg Asp Gln Ser Ser Met Glu Asp Gly Glu Asp Thr Pro  
    245                                      250                                      255  
 Val Thr Lys Leu Gln Arg Phe Asn Ser Tyr Asp Ile Ser Arg Asp Thr  
    260                                      265                                      270  
 Leu Tyr Val Ser Lys Cys Ile Cys Leu Ile Thr Pro Met Ser Phe Met  
    275                                      280                                      285  
 Lys Ala Cys Arg Ser Val Pro Gly Gln Leu His Gln Ala Val Thr Ser  
    290                                      295                                      300  
 Pro Gln Pro Pro Pro Leu Pro Leu Glu Ser Tyr Ile Tyr Asn Val Leu  
 305                                      310                                      315                                      320  
 Tyr Glu Val Pro Leu Pro Pro Pro Gly Arg Ser Leu Lys Phe Ser Gly  
    325                                      330                                      335  
 Val Tyr Trp Pro Ile Ile Cys Gln Arg Pro Ser Thr Asn Glu Leu Pro  
    340                                      345                                      350  
 Leu Phe Asp Phe Pro Val Lys Glu Val Phe Glu Leu Leu Gly Val Glu  
    355                                      360                                      365  
 Asn Val Phe Gln Leu Phe Thr Cys Ala Leu Leu Glu Phe Gln Ile Leu  
    370                                      375                                      380  
 Leu Tyr Ser Gln His Tyr Gln Arg Leu Met Thr Val Ala Glu Thr Ile  
 385                                      390                                      395                                      400  
 Thr Ala Leu Met Phe Pro Phe Gln Trp Gln His Val Tyr Val Pro Ile  
    405                                      410                                      415  
 Leu Pro Ala Ser Leu Leu His Phe Leu Asp Ala Pro Val Pro Tyr Leu  
    420                                      425                                      430  
 Met Gly Leu His Ser Asn Gly Leu Asp Asp Arg Ser Lys Leu Glu Leu  
    435                                      440                                      445  
 Pro Gln Glu Ala Asn Leu Cys Phe Val Asp Ile Asp Asn His Phe Ile  
    450                                      455                                      460  
 Glu Leu Pro Glu Asp Leu Pro Gln Phe Pro Asn Lys Leu Glu Phe Val  
 465                                      470                                      475                                      480  
 Gln Glu Val Ser Glu Ile Leu Met Ala Phe Gly Ile Pro Pro Glu Gly  
    485                                      490                                      495  
 Asn Leu His Cys Ser Glu Ser Ala Ser Lys Leu Lys Arg Leu Arg Ala

500 505 510  
 Ser Glu Leu Val Ser Asp Lys Arg Asn Gly Asn Ile Ala Gly Ser Pro  
 515 520 525  
 Leu His Ser Tyr Glu Leu Leu Lys Glu Asn Glu Thr Ile Ala Arg Leu  
 530 535 540  
 Gln Ala Leu Val Lys Arg Thr Gly Val Ser Leu Glu Lys Leu Glu Val  
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 Arg Glu Asp Pro Ser Ser Asn Lys Asp Leu Lys Val Gln Cys Asp Glu  
 565 570 575  
 Glu Glu Leu Arg Ile Tyr Gln Leu Asn Ile Gln Ile Arg Glu Val Phe  
 580 585 590  
 Ala Asn Arg Phe Thr Gln Met Phe Ala Asp Tyr Glu Val Phe Val Ile  
 595 600 605  
 Gln Pro Ser Gln Asp Lys Glu Ser Trp Phe Thr Asn Arg Glu Gln Met  
 610 615 620  
 Gln Asn Phe Asp Lys Ala Ser Phe Leu Ser Asp Gln Pro Glu Pro Tyr  
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 Leu Pro Phe Leu Ser Arg Phe Leu Glu Thr Gln Met Phe Ala Phe Phe  
 645 650 655  
 Ile Asp Asn Lys Ile Met Cys His Asp Asp Asp Lys Asp Pro Val  
 660 665 670  
 Leu Arg Val Phe Asp Ser Arg Val Asp Lys Ile Arg Leu Leu Asn Val  
 675 680 685  
 Arg Thr Pro Thr Leu Arg Thr Ser Met Tyr Gln Lys Cys Thr Thr Val  
 690 695 700  
 Asp Glu Ala Glu Lys Ala Ile Glu Leu Arg Leu Ala Lys Ile Asp His  
 705 710 715 720  
 Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln Gly Lys  
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 Tyr Glu Pro Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu Cys Thr  
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 Gly Pro Ala Ser Asn Lys Trp Thr Lys Arg Asn Ala Pro Ala Gln Trp  
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 770 775 780  
 Asn Asp Gln Arg Glu Lys Tyr Ile Gln Glu Ala Arg Thr Met Gly Ser  
 785 790 795 800  
 Thr Ile Arg Gln Pro Lys Leu Ser Asn Leu Ser Pro Ser Val Ile Ala  
 805 810 815  
 Gln Thr Asn Trp Lys Phe Val Glu Gly Leu Leu Lys Glu Cys Arg Asn  
 820 825 830  
 Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly Arg Glu Ala Val Glu  
 835 840 845  
 Leu Gly His Gly Glu Val Asn Ile Thr Gly Val Glu Glu Asn Thr Leu  
 850 855 860  
 Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His Gly Leu  
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 Gln Val Lys Gln Gly Lys Ser Ala Leu Trp Ser His Leu Leu His Tyr  
 885 890 895  
 Gln Asp Asn Arg Gln Arg Lys Leu Thr Ser Gly Ser Leu Ser Thr Ser  
 900 905 910  
 Gly Ile Leu Leu Asp Ser Glu Arg Arg Lys Ser Asp Ala Ser Ser Leu  
 915 920 925  
 Met Pro Pro Leu Arg Ile Ser Leu Ile Gln Asp Met Arg His Ile Gln



930	935	940
Asn Ile Gly Glu Ile Lys Thr Asp Val Gly Lys Ala Arg Ala Trp Val		
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Arg Leu Ser Met Glu Lys Lys Leu Leu Ser Arg His Leu Lys Gln Leu		960
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Leu Ser Asp His Glu Leu Thr Lys Lys Leu Tyr Lys Arg Tyr Ala Phe		975
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Leu Arg Cys Asp Asp Glu Lys Glu Gln Phe Leu Tyr His Leu Leu Ser		990
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Phe Asn Ala Val Asp Tyr Phe Cys Phe Thr Asn Val Phe Thr Thr Ile		1005
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Ser Met Phe Thr Ala Asn Pro Trp Ile Cys Ile Ser Gly Glu Leu Gly		1035
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Glu Thr Gln Ile Met Gln Ile Pro Arg Asn Val Leu Glu Met Thr Phe		1055
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Glu Cys Gln Asn Leu Gly Lys Leu Thr Thr Val Gln Ile Gly His Asp		1070
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Asn Ser Gly Leu Tyr Ala Lys Trp Leu Val Glu Tyr Val Met Val Arg		1085
	1090	1095
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Gly Lys Gly Met Asp Asp Gly Ser Leu Glu Arg Ile Leu Val Gly Glu		1115
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Pro Leu Gln Gln Ser Pro Ser Val Ile Arg Arg Leu Val Thr Ile Ser		1150
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Pro Asn Asn Lys Pro Lys Leu Asn Thr Gly Gln Ile Gln Glu Ser Ile		1165
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Gly Glu Ala Val Asn Gly Ile Val Lys His Phe His Lys Pro Glu Lys		1180
	1185	1190
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Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		1245
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Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu		1275
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Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		1295
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Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		1310
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His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		1325
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 <211> 1001  
 <212> DNA  
 <213> Homo sapiens

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<210> 3100  
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 <212> PRT  
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 Phe Thr Leu Pro Phe Trp Ala Val Asn Ala Val His Gly Trp Val Leu  
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 Gly Lys Ile Met Cys Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe

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Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro
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Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile
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Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu
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Glu Ile Cys Ile Gly Phe Val Val Pro Phe Leu Ile Met Gly Val
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&lt;210&gt; 3101

&lt;211&gt; 2623

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3101

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<210> 3102  
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 <212> PRT  
 <213> Homo sapiens

<400> 3102

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Pro Pro Asp Asp Leu Asp Leu Phe Pro Thr Pro Asp Pro His Tyr Glu
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Lys Lys Tyr Tyr Phe Pro Val Arg Glu Leu Glu Arg Ser Leu Arg Phe
      65           70           75           80
Asp Met Lys Gly Asp Asp Val Ile Val Phe Leu His Ile Gln Lys Thr
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Gly Gly Thr Thr Phe Gly Arg His Leu Val Gln Asn Val Arg Leu Glu
      100          105          110
Val Pro Cys Asp Cys Arg Pro Gly Gln Lys Lys Cys Thr Cys Tyr Arg
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Pro Asn Arg Arg Glu Thr Trp Leu Phe Ser Arg Phe Ser Thr Gly Trp
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Ser Cys Gly Leu His Ala Asp Trp Thr Glu Leu Thr Asn Cys Val Pro
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Gly Val Leu Asp Arg Arg Asp Ser Ala Ala Leu Arg Thr Pro Arg Lys
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Phe Tyr Tyr Ile Thr Leu Leu Arg Asp Pro Val Ser Arg Tyr Leu Ser
      180          185          190
Glu Trp Arg His Val Gln Arg Gly Ala Thr Trp Lys Thr Ser Leu His
      195          200          205
Met Cys Asp Gly Arg Thr Pro Thr Pro Glu Glu Leu Pro Pro Cys Tyr
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Glu Gly Thr Asp Trp Ser Gly Cys Thr Leu Gln Glu Phe Met Asp Cys
      225          230          235          240
Pro Tyr Asn Leu Ala Asn Asn Arg Gln Val Arg Met Leu Ala Asp Leu
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Ser Leu Val Gly Cys Tyr Asn Leu Ser Phe Ile Pro Glu Gly Lys Arg
      260          265          270
Ala Gln Leu Leu Leu Glu Ser Ala Lys Lys Asn Leu Arg Gly Met Ala
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Arg Thr Phe Asn Leu Lys Phe Ile Arg Pro Phe Met Gln Tyr Asn Ser
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Thr Arg Ala Gly Gly Val Glu Val Asp Glu Asp Thr Ile Arg Arg Ile
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Glu Glu Leu Asn Asp Leu Asp Met Gln Leu Tyr Asp Tyr Ala Lys Asp
      340          345          350
Leu Phe Gln Gln Arg Tyr Gln Tyr Lys Arg Gln Leu Glu Arg Arg Glu
      355          360          365
Gln Arg Leu Arg Ser Arg Glu Glu Arg Leu Leu His Arg Ala Lys Glu

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Asp	Tyr	Met	Ser	His	Ile	Ile	Glu	Lys	Trp						
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&lt;210&gt; 3103

&lt;211&gt; 1228

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3103

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 50 55 60  
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 Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro  
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 Cys Glu Thr Thr Pro Gly Ala Lys Gly Asp Ser His Lys Thr Gln Val  
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<212> PRT

<213> Homo sapiens

<400> 3106

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&lt;210&gt; 3108

&lt;211&gt; 517

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3108

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Pro	Lys	His	Trp	Thr	Lys	Glu	Arg	His	Gln	Phe	Leu	Met	Glu	Leu	Lys
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Phe	Ala	Asp	Thr	Asp	Asn	Ile	Leu	Thr	Asn	Asn	Gln	Thr	Leu	Arg	Leu
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Leu	Met	Gly	Gln	Gly	Leu	Pro	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Gln
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Thr	Tyr	Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Ile	Thr	Pro	Gln	Gly	Tyr	Tyr
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Arg	Arg	Thr	Ala	Glu	Tyr	Phe	Pro	Thr	Lys	Asn	Arg	Gln	Arg	Arg	Gly
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Cys	Phe	Arg	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ala	Ser	Leu	Arg
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Ala	Gly	Val	Ser	Val	His	Val	Cys	Asn	Glu	His	Arg	Tyr	Gly	Tyr	Met

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 Ala Ser Ala His Val Thr Arg Pro Ser Lys Arg Pro Ser Lys Ile Gly  
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 Gly Arg Lys Gln Val Asn Pro Glu Lys Glu Thr Ala Val Glu Gly Leu  
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 Pro Gly Leu Val Val Ala Gly Tyr Ser Tyr Trp Thr Leu Ala Tyr Ala  
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 Arg Met Leu Pro Val Asp Glu Phe Leu Pro Ile Met Phe Asp Gln His  
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 Pro Asn Glu Gln Tyr Lys Ala His Phe Trp Pro Arg Asp Leu Val Ala  
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 Ser Gly Arg Leu Ile Ser Trp Ser Gly Ser Gln Lys Thr Leu Arg Ser  
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&lt;211&gt; 959

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3109

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<211> 207

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<213> Homo sapiens

<400> 3110

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			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
			35				40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
	50				55					60					
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
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			85					90					95		
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100				105					110			
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
	115					120					125				
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
	130					135				140					
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

145		150		155		160									
Ile	Lys	Ser	Val	Ala	Trp	Ser	Pro	Ser	Ser	Gln	Phe	Leu	Ala	Val	Gly
		165				170								175	
Ser	Tyr	Asp	Gly	Lys	Val	Arg	Ile	Leu	Asn	His	Val	Thr	Trp	Lys	Met
		180						185					190		
Ile	Thr	Glu	Phe	Gly	His	Pro	Cys	Ser	Pro	Ile	Asn	Asp	Ser	Gln	
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&lt;210&gt; 3111

&lt;211&gt; 1269

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3111

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 1269

<210> 3112  
 <211> 151  
 <212> PRT  
 <213> Homo sapiens

<400> 3112  
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                   20                  25                  30  
 Glu Gly Arg Arg Gly Ala Arg Thr Ala Gly Leu Arg Gly Arg Pro Trp  
                   35                  40                  45  
 Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu  
                   50                  55                  60  
 Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile  
                   65                  70                  75                  80  
 Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser  
                   85                  90                  95  
 Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln  
                   100                  105                  110  
 Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser  
                   115                  120                  125  
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 Pro Tyr Gln Glu Thr Gly Ser  
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<210> 3113  
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 <212> DNA  
 <213> Homo sapiens

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<210> 3114  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<400> 3114  
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 Ile Val Ala Ile Met Ile Pro Glu Pro Lys Gly Lys Glu Ile Val Ser  
 35 40 45  
 Leu Leu Glu Arg Asn Ile Thr Val Thr Met Tyr Ile Thr Ile Gly Thr  
 50 55 60  
 Arg Asn Leu Gln Lys Tyr Val Ser Arg Thr Ser Val Val Phe Val Ser  
 65 70 75 80  
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe  
 85 90 95  
 Tyr Tyr Ile Gln Arg Phe Arg Tyr Ala Asn Ala Arg Asp Arg Asn Gln  
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 Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Gln Ile  
 115 120 125  
 Arg Thr Ile Lys Lys Gly Asp Lys Glu Thr Glu Ser Asp Phe Asp Asn  
 130 135 140  
 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile  
 145 150 155 160  
 Leu Pro Cys Arg His Leu Phe His Lys Ser Cys Val Asp Pro Trp Leu  
 165 170 175  
 Leu Asp His Arg Thr Cys Pro Met Cys Lys Met Asn Ile Leu Lys Ala  
 180 185 190  
 Leu Gly Ile Pro Pro Asn Ala Asp Cys Met Asp Asp Phe Ala Thr Asp  
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 Phe Glu  
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<210> 3115  
 <211> 1366  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3116

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3116

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Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
		35					40					45			
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

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Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr				
65	70	75	80	
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys				
	85	90	95	
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile				
	100	105	110	
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln				
	115	120	125	
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro				
	130	135	140	
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr				
145	150	155	160	
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr				
	165	170	175	
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser				
	180	185	190	

&lt;210&gt; 3117

&lt;211&gt; 1373

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3117

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<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

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Ser	Ser	Ile	Ser	Cys	Gln	Pro	Pro	Ala	Glu	Ile	Pro	Gly	Tyr	Leu	Pro
			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
		35					40					45			
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
		50				55					60				
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65					70					75				80	
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
				85					90					95	
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
		100						105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
		115					120					125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
		130				135					140				
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145					150					155				160	
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
				165					170					175	
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
			180					185					190		
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
		195				200						205			
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
		210				215					220				
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225					230					235				240	
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

245 250 255  
 Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp Gln Asn Leu  
 260 265 270  
 Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys Met Phe Ser  
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 Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys Gly Gln Thr  
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 Leu Leu Ala Val Ala Lys Ser Gln  
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<210> 3119

<211> 427

<212> DNA

<213> Homo sapiens

<400> 3119

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 180  
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 300  
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<210> 3120

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3120

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 His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser  
 35 40 45  
 Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser  
 50 55 60  
 Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr  
 65 70 75 80  
 Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala  
 85 90 95  
 Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala  
 100 105 110  
 Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr



115                      120                      125  
 Leu Asn Tyr Thr Ala Tyr Tyr Pro Ser Pro Glu Asp Asn Ala  
 130                      135                      140

<210> 3121  
 <211> 284  
 <212> DNA  
 <213> Homo sapiens

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 180  
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<210> 3122  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 3122  
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 Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala  
 35                      40                      45  
 Ser Ile Val Pro Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu  
 50                      55                      60  
 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg  
 65                      70                      75                      80  
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val  
 85                      90

<210> 3123  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 3123  
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 120  
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 180  
 atcgagctcc ccaagttcaa acagaggaag ggggagtcgg acggggccta tatccaccgc  
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atgcagcaag aggccagca tgtgctgttc ctcagcaaga accaggccat ccggcagcca  
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<210> 3124  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 3124  
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 20 25 30  
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys  
 35 40 45  
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln  
 50 55 60  
 His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val  
 65 70 75 80  
 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys  
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<210> 3125  
 <211> 647  
 <212> DNA  
 <213> Homo sapiens

<400> 3125  
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 120  
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 180  
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 240  
 aaaactgcag cccatcctgg aattagggaa catcacaaaa cgtactgggg agaactcccc  
 300  
 atgtggcctc ggcccacgcc agaagccggg caaggtccca agtgccggct cgcccacaag  
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 420  
 aacctatctt cctgtgttct ctgccaagag agctggagca aaagagatga gtttgagact  
 480  
 ctgattcatc catcaagaca aataaactca gtctatggag gttagcaggg caatttgtga  
 540  
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<210> 3126

<211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 3126  
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 Phe Gln Asn Ser Thr Phe Val Cys Phe Thr Asn Cys Pro Ala Asn Leu  
 20 25 30  
 His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr  
 35 40 45  
 His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly  
 50 55 60  
 Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser  
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 Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg  
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 Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe  
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 Cys Asp Val Pro  
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<210> 3127  
 <211> 2218  
 <212> DNA  
 <213> Homo sapiens

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2218

&lt;210&gt; 3128

&lt;211&gt; 565

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu  
35 40 45  
Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe  
50 55 60  
Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly  
65 70 75 80  
Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly  
85 90 95  
Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys  
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Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala  
115 120 125  
Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu  
130 135 140  
Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn  
145 150 155 160  
Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val  
165 170 175  
Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu  
180 185 190  
Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly  
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Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile  
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Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala  
225 230 235 240  
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245 250 255  
Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr  
260 265 270  
Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu  
275 280 285  
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325 330 335  
Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg  
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Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile  
355 360 365  
Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly  
370 375 380  
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385 390 395 400  
Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg  
405 410 415  
Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

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Val	Val	His	Pro	Ser	Leu	Ala	Asp	Ser	Ala	Asn	Lys	Phe	Glu	Glu	Asn		
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Thr	Tyr	Cys	Phe	Gly	Arg	Thr	Val	Glu	Thr	Leu	Leu	Leu	Arg	Phe	Gly		
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Lys	Thr	Ile	Met	Glu	Glu	Gln	Leu	Val	Leu	Lys	Arg	Val	Ala	Asn	Ile		
465										470			475			480	
Leu	Ile	Asn	Leu	Tyr	Gly	Met	Thr	Ala	Val	Leu	Ser	Arg	Ala	Ser	Arg		
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Ser	Ile	Arg	Ile	Gly	Leu	Arg	Asn	His	Asp	His	Glu	Val	Leu	Leu	Ala		
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Asn	Thr	Phe	Cys	Val	Glu	Ala	Tyr	Leu	Gln	Asn	Leu	Phe	Ser	Leu	Ser		
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Gln	Leu	Asp	Lys	Tyr	Ala	Pro	Glu	Asn	Leu	Asp	Glu	Gln	Ile	Lys	Lys		
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Val	Ser	Gln	Gln	Ile	Leu	Glu	Lys	Arg	Ala	Tyr	Ile	Cys	Ala	His	Pro		
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<210> 3129
<211> 1964
<212> DNA
<213> Homo sapiens
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840
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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
			35					40				45			
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
	50					55					60				
Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

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 Lys Phe Pro Gly Val Ser Phe Gly Ile Ser Thr Asp Ser Glu Val Leu  
    85                                      90                                      95  
 Thr His Tyr Asn Ile Thr Gly Asn Thr Ile Cys Leu Phe Arg Leu Val  
    100                                      105                                      110  
 Asp Asn Glu Gln Leu Asn Leu Glu Asp Glu Asp Ile Glu Ser Ile Asp  
    115                                      120                                      125  
 Ala Thr Lys Leu Ser Arg Phe Ile Glu Ile Asn Ser Leu His Met Val  
    130                                      135                                      140  
 Thr Glu Tyr Asn Pro Val Thr Val Ile Gly Leu Phe Asn Ser Val Ile  
 145                                      150                                      155                                      160  
 Gln Ile His Leu Leu Leu Ile Met Asn Lys Ala Ser Pro Glu Tyr Glu  
    165                                      170                                      175  
 Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Gln Gly Lys  
    180                                      185                                      190  
 Ile Leu Phe Ile Leu Val Asp Ser Gly Met Lys Glu Asn Gly Lys Val  
    195                                      200                                      205  
 Ile Ser Phe Phe Lys Leu Lys Glu Ser Gln Leu Pro Ala Leu Ala Ile  
    210                                      215                                      220  
 Tyr Gln Thr Leu Asp Asp Glu Trp Asp Thr Leu Pro Thr Ala Glu Val  
 225                                      230                                      235                                      240  
 Ser Val Glu His Val Gln Asn Phe Cys Asp Gly Phe Leu Ser Gly Lys  
    245                                      250                                      255  
 Leu Leu Lys Glu Asn Arg Glu Ser Lys Arg Lys Thr Pro Lys Val Glu  
    260                                      265                                      270  
 Leu

&lt;210&gt; 3131

&lt;211&gt; 1544

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3131

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&lt;210&gt; 3132

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3132

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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
			35				40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
			50			55					60				
His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
65					70				75					80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85				90						95		
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
			100				105					110			
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

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145              150              155              160
Arg Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp
      165              170              175
Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp Lys Ser Leu Ile Glu Glu
      180              185              190
Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly
      195              200              205
Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr
      210              215              220
Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly
225              230              235              240
Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe
      245              250              255
Ser Glu Tyr Val Leu Arg Arg Glu Leu Arg Arg Thr Pro Arg Val Pro
      260              265              270
Ser Val Ile Arg Ile Lys Gln Glu Pro Leu Asp
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&lt;210&gt; 3133

&lt;211&gt; 621

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3133

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621

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&lt;210&gt; 3134

&lt;211&gt; 51

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3134

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Ala	Val	Arg	Gln	Val	Pro	Ser	Ser	Cys	Ala	Ala	Ser	Arg	Lys	Asn	Glu
		20						25					30		
Thr	Glu	Val	Lys	Ser	Glu	Glu	Gly	Pro	Gly	Trp	Thr	Ile	Leu	Arg	Asp
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Asp	Phe	Met													
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<210> 3135

<211> 3166

<212> DNA

<213> Homo sapiens

<400> 3135

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His Phe Ser Phe Thr Met Leu His Phe Ile Lys Asn Gln Leu Glu Thr
785              790              795              800
Ala Pro Pro His Glu Leu Lys Asn Thr Phe Gln Leu Leu His Glu Ile
      805              810              815
Leu Val Ile Glu Asp Pro Ile Gln Ala Glu Arg Val Lys Phe Val Phe
      820              825              830
Glu Thr Glu Asn Gly Leu Leu Ala Leu Met His His Ser Asn His Val
      835              840              845
Asp Ser Ser Arg Cys Tyr Gln Cys Val Lys Phe Leu Val Thr Leu Ala
      850              855              860
Gln Lys Cys Pro Ala Ala Lys Glu Tyr Phe Lys Glu Asn Ser His His
865              870              875              880
Trp Ser Trp Ala Val Gln Trp Leu Gln Lys Lys Met Ser Glu His Tyr

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      885      890      895
Trp Thr Pro Gln Ser Asn Val Ser Asn Glu Thr Ser Thr Gly Lys Thr
      900      905      910
Phe Gln Arg Thr Ile Ser Ala Gln Asp Ala Leu Ala Tyr Ala Thr Ala
      915      920      925
Leu Leu Asn Glu Lys Glu Gln Ser Gly Ser Ser Asn Gly Ser Glu Ser
      930      935      940
Ser Pro Ala Asn Glu Asn Gly Asp Arg His Leu Gln Gln Gly Ser Glu
945      950      955      960
Ser Pro Met Met Ile Gly Glu Leu Arg Ser Asp Leu Asp Asp Val Asp
      965      970      975
Pro

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<210> 3139  
 <211> 503  
 <212> DNA  
 <213> Homo sapiens

<400> 3139  
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 120  
 acctccccgc tgctatggta cttctactca gccctgcccc gcggcctggg ctgcagcctg  
 180  
 ctcttcatcc ccttgggctt ggtagacaga aggacgcacg cgccgacggt gctggcactg  
 240  
 ggcttcatgg cactctactc cctcctgcc aacaaggagc tacgcttcat catctatgcc  
 300  
 ttcccatgc tcaacatcac ggctgccaga ggctgctcct acctgtgagt gctctttttg  
 360  
 tgacatgcat ttttatagtt tcattggaaa caggttcact gatttactgt tgggggggatg  
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 480  
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 503

<210> 3140  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 3140  
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 Arg Gln Leu Thr Trp Pro Glu Gly Lys Val Leu Trp Tyr Asn Thr Val  
 20 25 30  
 Leu Asn Lys Ser Ser Asn Trp Gly Thr Ser Pro Leu Leu Trp Tyr Phe  
 35 40 45  
 Tyr Ser Ala Leu Pro Arg Gly Leu Gly Cys Ser Leu Leu Phe Ile Pro  
 50 55 60  
 Leu Gly Leu Val Asp Arg Arg Thr His Ala Pro Thr Val Leu Ala Leu

65		70		75		80									
Gly	Phe	Met	Ala	Leu	Tyr	Ser	Leu	Leu	Pro	His	Lys	Glu	Leu	Arg	Phe
			85						90					95	
Ile	Ile	Tyr	Ala	Phe	Pro	Met	Leu	Asn	Ile	Thr	Ala	Ala	Arg	Gly	Cys
			100					105					110		
Ser	Tyr	Leu													
			115												

&lt;210&gt; 3141

&lt;211&gt; 1815

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3141

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1080
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1200

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 1320  
 ctgtcgagga agtctcccta cctgccctcg gcccaccggg tcagcgggct catgatggcc  
 1380  
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 1680  
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<210> 3142

<211> 451

<212> PRT

<213> Homo sapiens

<400> 3142

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Ile	Gly	Phe	Glu	Phe	Trp	Lys	Gln	Leu	Cys	Ala	Glu	His	Gly	Ile	Ser
			20				25						30		
Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
			35				40					45			
Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
		50				55					60				
Val	Leu	Leu	Asp	Leu	Glu	Pro	Arg	Val	Ile	His	Ser	Ile	Leu	Asn	Ser
65					70					75				80	
Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
				85					90					95	
Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
			100					105					110		
Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
		115				120					125				
Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
		130				135					140				
Thr	Gly	Ser	Gly	Leu	Gly	Ser	Tyr	Leu	Leu	Glu	Arg	Leu	Asn	Asp	Arg
145				150						155				160	
Tyr	Pro	Lys	Lys	Leu	Val	Gln	Thr	Tyr	Ser	Val	Phe	Pro	Asn	Gln	Asp
				165					170					175	
Glu	Met	Ser	Asp	Val	Val	Val	Gln	Pro	Tyr	Asn	Ser	Leu	Leu	Thr	Leu
			180				185					190			
Lys	Arg	Leu	Thr	Gln	Asn	Ala	Asp	Cys	Val	Val	Val	Leu	Asp	Asn	Thr

195	200	205
Ala Leu Asn Arg Ile	Ala Thr Asp Arg Leu His Ile	Gln Asn Pro Ser
210	215	220
Phe Ser Gln Ile Asn Gln	Leu Val Ser Thr Ile Met	Ser Ala Ser Thr
225	230	235
Thr Thr Leu Arg Tyr	Pro Gly Tyr Met Asn Asn	Asp Leu Ile Gly Leu
245	250	255
Ile Ala Ser Leu Ile	Pro Thr Pro Arg Leu His	Phe Leu Met Thr Gly
260	265	270
Tyr Thr Pro Leu Thr	Thr Asp Gln Ser Val Ala	Ser Val Arg Lys Thr
275	280	285
Thr Val Leu Asp Val	Met Arg Arg Leu Leu Gln	Pro Lys Asn Val Met
290	295	300
Val Ser Thr Gly Arg	Asp Arg Gln Thr Asn His	Cys Tyr Ile Ala Ile
305	310	315
Leu Asn Ile Ile Gln	Gly Glu Val Asp Pro Thr	Gln Val His Lys Ser
325	330	335
Leu Gln Arg Ile Arg	Glu Arg Lys Leu Ala Asn	Phe Ile Pro Trp Gly
340	345	350
Pro Ala Ser Ile Gln	Val Ala Leu Ser Arg Lys	Ser Pro Tyr Leu Pro
355	360	365
Ser Ala His Arg Val	Ser Gly Leu Met Met Ala	Asn His Thr Ser Ile
370	375	380
Ser Ser Leu Phe Glu	Arg Thr Cys Arg Gln Tyr	Asp Lys Leu Arg Lys
385	390	395
Arg Glu Ala Phe Leu	Glu Gln Phe Arg Lys Glu	Asp Met Phe Lys Asp
405	410	415
Asn Phe Asp Glu Met	Asp Thr Ser Arg Glu Ile	Val Gln Gln Leu Ile
420	425	430
Asp Glu Tyr His Ala	Ala Thr Arg Pro Asp Tyr	Ile Ser Trp Gly Thr
435	440	445
Gln Glu Gln		
450		

&lt;210&gt; 3143

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3143

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240  
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356

&lt;210&gt; 3144

<211> 81  
 <212> PRT  
 <213> Homo sapiens

<400> 3144  
 Met Val Ile Phe Val Ala Ala Thr Ala Ser His Ser Ser Thr Trp Val  
 1 5 10 15  
 Ser Glu Ala Leu Asn Ser Ala Ser Ala Ser Arg Pro Ala Trp Gly Met  
 20 25 30  
 Ala Trp Leu Thr Val Lys His Pro His Thr Val Asp Gln Gln Pro Pro  
 35 40 45  
 Leu Pro Thr Ser Gln Glu Leu Arg Pro Ala Ala Gln Pro Lys Gln Gln  
 50 55 60  
 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro  
 65 70 75 80  
 Ser

<210> 3145  
 <211> 436  
 <212> DNA  
 <213> Homo sapiens

<400> 3145  
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 120  
 ctccgaggag cccgctccac ctgccctcag gaggggtgttt aaaacggagg ttgccaccgt  
 180  
 ttacgcacct gccctcagt ccagggcccc cgagcctggt ttgtcagact ctgcagccgc  
 240  
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 300  
 gctccaggcg ccctcgaaa ctgccctggc ctgctcacc ccatgcagt gcctgtcccc  
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 436

<210> 3146  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 3146  
 Met Glu Lys Leu Arg Ser Lys Thr Pro Leu Gly Leu His Pro Lys Ser  
 1 5 10 15  
 Pro Ile Thr Ser Cys Ser Gly Gly Pro Ser Arg Thr Gly Gly Gly Gln  
 20 25 30  
 Thr Pro Arg Ser Pro Leu His Leu Pro Ser Gly Gly Cys Leu Lys Arg  
 35 40 45  
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser



50		55		60
Leu Val Cys Gln Thr	Leu Gln Pro Pro Ala Ser Gly His Ser Ala Arg			
65	70	75	80	
Gln Met Thr Ser Gly Gly Glu Pro His Ile Ser Thr Gly Ser Arg Arg				
	85	90	95	
Pro Arg Lys Leu Pro Trp Pro Ala His Pro Arg Cys Ser Ala Cys Pro				
	100	105	110	
Pro Asn Val Val Ser Ser Arg Arg Arg Leu Thr Pro Arg Arg Gly Trp				
	115	120	125	
Gly Thr Ser				
130				

&lt;210&gt; 3147

&lt;211&gt; 3106

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3147

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 660  
 aagtgaacc accttgtcca caaatcgtc attggccact taaagggtgc ctctgccaac  
 720  
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 780  
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 1020  
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 1080

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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Ser	Val	Pro	Thr	Phe	Ser	Trp	Glu	Glu	Ile	Gln	Lys	His	Asn	Leu	Arg
			20				25						30		
Thr	Asp	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Thr	Lys
		35					40					45			
Trp	Ser	Ile	Gln	His	Pro	Gly	Gly	Gln	Arg	Val	Ile	Gly	His	Tyr	Ala
		50				55					60				
Gly	Glu	Asp	Ala	Thr	Asp	Ala	Phe	Arg	Ala	Phe	His	Pro	Asp	Leu	Glu
65				70					75					80	
Phe	Val	Gly	Lys	Phe	Leu	Lys	Pro	Leu	Leu	Ile	Gly	Glu	Leu	Ala	Pro
			85					90						95	
Glu	Glu	Pro	Ser	Gln	Asp	His	Gly	Lys	Asn	Ser	Lys	Ile	Thr	Glu	Asp
			100					105					110		
Phe	Arg	Ala	Leu	Arg	Lys	Thr	Ala	Glu	Asp	Met	Asn	Leu	Phe	Lys	Thr
		115					120					125			
Asn	His	Val	Phe	Phe	Leu	Leu	Leu	Leu	Ala	His	Ile	Ile	Ala	Leu	Glu
		130				135					140				
Ser	Ile	Ala	Trp	Phe	Thr	Val	Phe	Tyr	Phe	Gly	Asn	Gly	Trp	Ile	Pro
145				150					155					160	
Thr	Leu	Ile	Thr	Ala	Phe	Val	Leu	Ala	Thr	Ser	Gln	Ala	Gln	Ala	Gly
			165					170						175	
Trp	Leu	Gln	His	Asp	Tyr	Gly	His	Leu	Ser	Val	Tyr	Arg	Lys	Pro	Lys
		180					185						190		
Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala
		195					200					205			
Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala	Lys	Pro
		210				215						220			
Asn	Ile	Phe	His	Lys	Asp	Pro	Asp	Val	Asn	Met	Leu	His	Val	Phe	Val
225				230						235				240	
Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr
			245					250					255		
Leu	Pro	Tyr	Asn	His	Gln	His	Glu	Tyr	Phe	Phe	Leu	Ile	Gly	Pro	Pro

260						265						270					
Leu	Leu	Ile	Pro	Met	Tyr	Phe	Gln	Tyr	Gln	Ile	Ile	Met	Thr	Met	Ile		
275						280						285					
Val	His	Lys	Asn	Trp	Val	Asp	Leu	Ala	Trp	Ala	Val	Ser	Tyr	Tyr	Ile		
290						295						300					
Arg	Phe	Phe	Ile	Thr	Tyr	Ile	Pro	Phe	Tyr	Gly	Ile	Leu	Gly	Ala	Leu		
305						310						315					
Leu	Phe	Leu	Asn	Phe	Ile	Arg	Phe	Leu	Glu	Ser	His	Trp	Phe	Val	Trp		
325						330						335					
Val	Thr	Gln	Met	Asn	His	Ile	Val	Met	Glu	Ile	Asp	Gln	Glu	Ala	Tyr		
340						345						350					
Arg	Asp	Trp	Phe	Ser	Ser	Gln	Leu	Thr	Ala	Thr	Cys	Asn	Val	Glu	Gln		
355						360						365					
Ser	Phe	Phe	Asn	Asp	Trp	Phe	Ser	Gly	His	Leu	Asn	Phe	Gln	Ile	Glu		
370						375						380					
His	His	Leu	Phe	Pro	Thr	Met	Pro	Arg	His	Asn	Leu	His	Lys	Ile	Ala		
385						390						395					
Pro	Leu	Val	Lys	Ser	Leu	Cys	Ala	Lys	His	Gly	Ile	Glu	Tyr	Gln	Glu		
405						410						415					
Lys	Pro	Leu	Leu	Arg	Ala	Leu	Leu	Asp	Ile	Ile	Arg	Ser	Leu	Lys	Lys		
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Ser	Gly	Lys	Leu	Trp	Leu	Asp	Ala	Tyr	Leu	His	Lys						
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<210> 3149

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 3149

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720

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<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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			20					25					30		
Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
		35					40					45			
Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
	50					55					60				
Gln	Leu	His	Arg	Arg	Phe	Lys	Gln	Leu	Ser	Gly	Asp	Gln	Pro	Thr	Ile
65					70					75				80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
			85						90					95	
Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
			100					105					110		
Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
		115					120					125			
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
	130					135					140				
Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
145				150						155				160	
Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
			165					170						175	
Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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cctgggcctc tcggtggagc agggacccga accggtgcc atccagtcgc gtgccatctg  
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240  
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480  
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720  
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780  
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1680  
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1740

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 1860  
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 1920  
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 1980  
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 2040  
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 2079

<210> 3152

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3152

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		20						25					30		
Ile	Ala	Ser	Trp	Lys	Gly	Leu	Val	Arg	Phe	Leu	Asn	Ser	Leu	Gly	Thr
		35					40					45			
Ile	Phe	Ser	Phe	Ile	Ser	Lys	Asp	Val	Val	Ser	Lys	Leu	Arg	Ile	Met
	50					55					60				
Glu	Arg	Leu	Arg	Gly	Gly	Pro	Gln	Ser	Glu	His	Tyr	Arg	Ser	Leu	Gln
65				70						75				80	
Ala	Met	Val	Ala	His	Glu	Leu	Ser	Asn	Arg	Leu	Val	Asp	Leu	Glu	Gly
			85					90					95		
Arg	Ser	His	His	Pro	Glu	Ser	Gly	Cys	Arg	Thr	Val	Leu	Arg	Leu	His
		100						105					110		
Arg	Ala	Leu	His	Trp	Leu	Gln	Leu	Phe	Leu	Glu	Gly	Leu	Arg	Thr	Ser
		115				120						125			
Pro	Glu	Asp	Ala	Arg	Thr	Ser	Ala	Leu	Cys	Ala	Asp	Ser	Tyr	Asn	Ala
	130					135					140				
Ser	Leu	Ala	Ala	Tyr	His	Pro	Trp	Val	Val	Arg	Arg	Ala	Val	Thr	Val
145					150					155				160	
Ala	Phe	Cys	Thr	Leu	Pro	Thr	Arg	Glu	Val	Phe	Leu	Glu	Ala	Met	Asn
			165					170					175		
Val	Gly	Pro	Pro	Glu	Gln	Ala	Val	Gln	Met	Leu	Gly	Glu	Ala	Leu	Pro
		180						185					190		
Phe	Ile	Gln	Arg	Val	Tyr	Asn	Val	Ser	Gln	Lys	Leu	Tyr	Ala	Glu	His
		195				200						205			
Ser	Leu	Leu	Asp	Leu	Pro										
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<210> 3153

<211> 1498

<212> DNA

<213> Homo sapiens

<400> 3153

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120  
ccactcagc aaccaacaag gaggaagcc cccgcagtgc tcggccagtg ccgcgccatc  
180  
gccaccaggg agcgccccgc gcgcggtcca cgtggcagag gtcgcggcct cgcggcgcgg  
240  
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300  
ggccgctgtc cggcgtgggc gggaggaggg gtctccggcg cgagcgcttg acccggcgcg  
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420  
gccccagta gatgctctcc ccgcgtcgga agtttctgtg cagccgtgtg cagagcgtgg  
480  
ccagggtgag cagcaccagc aggaaggtca gggccatggc agcccaggcg gcctcttcag  
540  
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600  
ctgacttgaa cagacacagc cccctgggct gccttgcccc ttgggcacct gagcctctgt  
660  
cctggagctg gcattgcctc caggcgcccc cggcagcagg gagacagtgg gcacagatgg  
720  
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960  
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1380  
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1440  
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1498

&lt;210&gt; 3154

&lt;211&gt; 65

&lt;212&gt; PRT



<213> Homo sapiens

<400> 3154

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Cys Pro Gly Ala Gly Ile Ala Ser Arg Arg Pro Arg Gln Gln Gly Asp
      20             25             30
Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
      35             40             45
Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln
 50             55             60
Gly
65

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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120
actaactgtg actcttcttc agaaggactg gaaaaggaca cagcaacaca gagaagtgc
180
cagacttgcc tagaaccatc atgttcatgt tcttctgaaa atcaggaatg ccagactgct
240
gccagccctg gggaaattct ggaaattttg aagaaagggg aggcatttgt tttagatatt
300
gacttggatt ttttttcagt caagaatccc ttcaaaaaaa tgttcactca ggaagagtac
360
aaaatcttac aagagctgta ccaatttaag aaacctggca ccaacctaac agaggaagat
420
ttggtagata ttgttgatac tcgaattcat caattagagg atttagaagc cactttcgct
480
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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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Val Ser Ser Ala Lys Lys Pro Lys Leu Ala Leu Glu Asp Ser Glu Asn
      20             25             30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
      35             40             45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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50		55		60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu				
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Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				
	85	90	95	
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
	100	105	110	
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115	120	125	
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130	135	140	
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
145	150	155	160	
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				
	165	170	175	
Ser Leu				

&lt;210&gt; 3157

&lt;211&gt; 903

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3157

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 420  
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 660  
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 720  
 gaacaggacc ccacggacga ggatccctgc cgggggtgtg gccctgctct ggtcaccacc  
 780  
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cac  
903

<210> 3158  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 3158  
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Val Leu Ser Glu Lys Met Glu Pro Ser Ser Phe Gln Pro Leu Pro Glu  
20 25 30  
Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr  
35 40 45  
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val  
50 55 60  
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln  
65 70 75 80  
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln  
85 90

<210> 3159  
<211> 2408  
<212> DNA  
<213> Homo sapiens

<400> 3159  
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ccctggcaga ctaacgaagc agctcccttc ccaccccaac tgcaggctca attttggacg  
180  
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240  
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gatgtagagc tggaaagatc tgcagaatcc tgggctgaaa gttgcttgtg ggaacatgga  
780

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900  
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1020  
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1080  
aagggaact ggtggggcca tgcccttac aaacatgggc ggccctgttc tgcttgcca  
1140  
cctagttttg gagggggctg tagagaaaat ctgtgttaca aagaagggtc agacagggtat  
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1260  
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1320  
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1560  
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1680  
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1740  
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1800  
tacatgctgg gagtagttcg aaatcacggt gggtatgttg atgtaatgcc tgtggacca  
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2040  
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2100  
aacaaggtct ataaaataaa acatgggaca ttagcttttg gaaaagtaat gaaaatata  
2160  
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2220  
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2280  
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2340  
aaaaataatc gactctaaaa ctgaaagaaa ccttatcaca ttttcccag ttcaatgcta  
2400

tgccatta

2408

&lt;210&gt; 3160

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3160

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Met Lys Cys Thr Ala Arg Glu Trp Leu Arg Val Thr Thr Val Leu Phe
 1           5           10           15
Met Ala Arg Ala Ile Pro Ala Met Val Val Pro Asn Ala Thr Leu Leu
 20           25           30
Glu Lys Leu Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu Trp Trp Ile
 35           40           45
Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn Asp Met Gln Ser
 50           55           60
Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln Val Tyr Pro Thr Ala
 65           70           75           80
Ser Asn Met Glu Tyr Met Thr Trp Asp Val Glu Leu Glu Arg Ser Ala
 85           90           95
Glu Ser Trp Ala Glu Ser Cys Leu Trp Glu His Gly Pro Ala Ser Leu
100           105           110
Leu Pro Ser Ile Gly Gln Asn Leu Gly Ala His Trp Gly Arg Tyr Arg
115           120           125
Pro Pro Thr Phe His Val Gln Ser Trp Tyr Asp Glu Val Lys Asp Phe
130           135           140
Ser Tyr Pro Tyr Glu His Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys
145           150           155           160
Ser Gly Pro Val Cys Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser
165           170           175
Asn Arg Ile Gly Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp
180           185           190
Gly Gln Ile Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro
195           200           205
Lys Gly Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys
210           215           220
Ser Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys
225           230           235           240
Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu Thr
245           250           255
Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His Val Arg
260           265           270
Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser Ala Gln Gln
275           280           285
Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg Asp Gln Cys Lys
290           295           300
Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala Gly Cys Leu Asp Ser
305           310           315           320
Lys Ala Lys Val Ile Gly Ser Val His Tyr Glu Met Gln Ser Ser Ile
325           330           335
Cys Arg Ala Ala Ile His Tyr Gly Ile Ile Asp Asn Asp Gly Gly Trp
340           345           350
Val Asp Ile Thr Arg Gln Gly Arg Lys His Tyr Phe Ile Lys Ser Asn

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355	360	365
Arg Asn Gly Ile Gln Thr Ile Gly Lys Tyr Gln Ser Ala Asn Ser Phe		
370	375	380
Thr Val Ser Lys Val Thr Val Gln Ala Val Thr Cys Glu Thr Thr Val		
385	390	395
Asp Ser Ser Val His Phe Ile Ser Leu Leu His Ile Ala Gln Glu Tyr		400
	405	410
Thr Val Leu Val Thr Val Cys Lys Gln Ile His Ile Met Leu Val		415
420	425	430

&lt;210&gt; 3161

&lt;211&gt; 1197

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3161

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420
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1197

<210> 3162

<211> 386

<212> PRT

<213> Homo sapiens

<400> 3162

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			20					25					30		
Ile	Thr	Ala	Ser	Ser	Asn	Lys	Ser	Leu	Asn	Leu	Leu	Lys	Ile	Lys	His
		35					40					45			
Gly	Asp	Leu	Leu	Phe	Leu	Phe	Pro	Ser	Ser	Leu	Ala	Gly	Pro	Ser	Ser
	50					55					60				
Glu	Met	Glu	Thr	Ser	Val	Pro	Pro	Gly	Phe	Lys	Val	Phe	Gly	Ala	Pro
65					70					75					80
Asn	Val	Val	Glu	Asp	Glu	Ile	Asp	Gln	Tyr	Leu	Ser	Lys	Gln	Asp	Gly
			85					90					95		
Lys	Ile	Tyr	Arg	Ser	Arg	Asp	Pro	Gln	Leu	Cys	Arg	His	Gly	Pro	Leu
			100					105					110		
Gly	Lys	Cys	Val	His	Cys	Val	Pro	Leu	Glu	Pro	Phe	Asp	Glu	Asp	Tyr
		115					120					125			
Leu	Asn	His	Leu	Glu	Pro	Pro	Val	Lys	His	Met	Ser	Phe	His	Ala	Tyr
	130					135					140				
Ile	Arg	Lys	Leu	Thr	Gly	Gly	Ala	Asp	Lys	Gly	Lys	Phe	Val	Ala	Leu
145					150					155					160
Glu	Asn	Ile	Ser	Cys	Lys	Ile	Lys	Ser	Gly	Cys	Glu	Gly	His	Leu	Pro
			165					170					175		
Trp	Pro	Asn	Gly	Ile	Cys	Thr	Lys	Cys	Gln	Pro	Ser	Ala	Ile	Thr	Leu
		180						185					190		
Asn	Arg	Gln	Lys	Tyr	Arg	His	Val	Asp	Asn	Ile	Met	Phe	Glu	Asn	His
		195					200					205			
Thr	Val	Ala	Asp	Arg	Phe	Leu	Asp	Phe	Trp	Arg	Lys	Thr	Gly	Asn	Gln
	210					215					220				
His	Phe	Gly	Tyr	Leu	Tyr	Gly	Arg	Tyr	Thr	Glu	His	Lys	Asp	Ile	Pro
225				230						235				240	
Leu	Gly	Ile	Arg	Ala	Glu	Val	Ala	Ala	Ile	Tyr	Glu	Pro	Pro	Gln	Ile
			245						250					255	
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		260						265				270			
Val	Asp	Glu	Ile	Ala	Ala	Lys	Leu	Gly	Leu	Arg	Lys	Val	Gly	Trp	Ile
		275					280					285			
Phe	Thr	Asp	Leu	Val	Ser	Glu	Asp	Thr	Arg	Lys	Gly	Thr	Val	Arg	Tyr
	290					295					300				
Ser	Arg	Asn	Lys	Asp	Thr	Tyr	Phe	Leu	Ser	Ser	Glu	Glu	Cys	Ile	Thr
305				310						315				320	
Ala	Gly	Asp	Phe	Gln	Asn	Lys	His	Pro	Asn	Met	Cys	Arg	Leu	Ser	Pro
			325						330					335	
Asp	Gly	His	Phe	Gly	Ser	Lys	Phe	Val	Thr	Ala	Val	Ala	Thr	Gly	Gly
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Pro	Asp	Asn	Gln	Val	His	Phe	Glu	Gly	Tyr	Gln	Val	Ser	Asn	Gln	Cys

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<210> 3164
<211> 94
<212> PRT
<213> Homo sapiens
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&lt;400&gt; 3164

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 Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser  
 35 40 45  
 Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly  
 50 55 60  
 Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala  
 65 70 75 80  
 Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val  
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&lt;210&gt; 3165

&lt;211&gt; 2413

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3165

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2413

&lt;210&gt; 3166

&lt;211&gt; 717

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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35 40 45  
Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys  
50 55 60  
Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser  
65 70 75 80  
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg  
85 90 95  
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg  
100 105 110  
Leu Leu Tyr Gly Met Ala Leu Val Arg Phe Val Asn Leu Ile Ser Glu  
115 120 125  
Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu  
130 135 140  
Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His  
145 150 155 160  
Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val  
165 170 175  
Leu Asp Trp Leu Gln Lys Thr Tyr Trp Cys Arg Gln Leu Glu Asn Ser  
180 185 190  
Leu Arg Glu Thr Trp Glu Leu Glu Glu Phe Arg Glu Gly Ile Glu Glu  
195 200 205  
Glu Asp Gln Glu Glu Asp Lys Asn Ile Val Val Asp Asp Ile Thr Glu  
210 215 220  
Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val  
225 230 235 240  
Lys Ala Asp Gly Asp Ser Lys Gly Ser Glu Glu Val Asp Ser His Cys  
245 250 255  
Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu  
260 265 270  
Leu Val Ser Tyr Glu Glu Glu Gln Phe Thr Val Leu Glu Lys Phe Arg  
275 280 285  
Tyr Leu Pro Lys Ala Ile Lys Ala Trp Asn Asn Pro Ser Pro Arg Val  
290 295 300  
Glu Cys Val Leu Ala Glu Leu Lys Gly Val Thr Cys Glu Asn Arg Glu  
305 310 315 320  
Ala Val Leu Asp Ala Phe Leu Asp Asp Gly Phe Leu Val Pro Thr Phe  
325 330 335  
Glu Gln Leu Ala Ala Leu Gln Ile Glu Tyr Glu Glu Asn Val Asp Leu  
340 345 350  
Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro Leu  
355 360 365  
Leu Arg Gly Leu His Ser Gln Asn Phe Thr Gln Ala Leu Leu Glu Arg  
370 375 380  
Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro Thr  
385 390 395 400  
Tyr Ile Leu Arg Trp Thr Val Glu Leu Ile Val Ala Asn Thr Lys Thr  
405 410 415  
Gly Arg Asn Ala Arg Arg Phe Ser Ala Gly Gln Trp Glu Ala Arg Arg

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Gly	Trp	Arg	Leu	Phe	Asn	Cys	Ser	Ala	Ser	Leu	Asp	Trp	Pro	Arg	Met			
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Val	Glu	Ser	Cys	Leu	Gly	Ser	Pro	Cys	Trp	Ala	Ser	Pro	Gln	Leu	Leu			
		450						455						460				
Arg	Ile	Ile	Phe	Lys	Ala	Met	Gly	Gln	Gly	Leu	Pro	Asp	Glu	Glu	Gln			
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Glu	Lys	Leu	Leu	Arg	Ile	Cys	Ser	Ile	Tyr	Thr	Gln	Ser	Gly	Glu	Asn			
				485						490						495		
Ser	Leu	Val	Gln	Glu	Gly	Ser	Glu	Ala	Ser	Pro	Ile	Gly	Lys	Ser	Pro			
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Tyr	Thr	Leu	Asp	Ser	Leu	Tyr	Trp	Ser	Val	Lys	Pro	Ala	Ser	Ser	Ser			
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Phe	Gly	Ser	Glu	Ala	Lys	Ala	Gln	Gln	Gln	Glu	Glu	Gln	Gly	Ser	Val			
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Asn	Asp	Val	Lys	Glu	Glu	Glu	Lys	Glu	Glu	Lys	Glu	Val	Leu	Pro	Asp			
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Gln	Val	Glu	Glu	Glu	Glu	Glu	Asn	Asp	Asp	Gln	Glu	Glu	Glu	Glu	Glu			
				565						570						575		
Asp	Glu	Asp	Asp	Glu	Asp	Asp	Glu	Glu	Glu	Asp	Arg	Met	Glu	Val	Gly			
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Pro	Phe	Ser	Thr	Gly	Gln	Glu	Ser	Pro	Thr	Ala	Glu	Asn	Ala	Arg	Leu			
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Gln	Thr	Glu	Asp	Pro	Ala	Glu	Leu	Met	Leu	Glu	Asn	Tyr	Asp	Thr	Met			
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Tyr	Leu	Leu	Asp	Gln	Pro	Val	Leu	Glu	Gln	Arg	Leu	Glu	Pro	Ser	Thr			
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Cys	Lys	Thr	Asp	Thr	Leu	Gly	Leu	Ser	Cys	Gly	Val	Gly	Ser	Gly	Asn			
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Cys	Ser	Asn	Ser	Ser	Ser	Ser	Asn	Phe	Glu	Gly	Leu	Leu	Trp	Ser	Gln			
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<211> 2730

<212> DNA

<213> Homo sapiens

<400> 3167

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1920

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&lt;210&gt; 3169

&lt;211&gt; 5945

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3169

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<211> 412

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<213> Homo sapiens

<400> 3170

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Pro	Glu	Gln	Gln	Met	Ile	Ala	Asp	Ile	His	Cys	Met	Ile	Ala	Ala	Gly
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Gln	Asp	Leu	Asp	Trp	Ile	Asp	Ala	Gln	Gly	Ala	Thr	Leu	Leu	His	Ile
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Ala	Gly	Ala	Asn	Gly	Tyr	Leu	Arg	Ala	Ala	Glu	Leu	Leu	Leu	Asp	His
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Gly	Val	Arg	Val	Asp	Val	Lys	Asp	Trp	Asp	Gly	Trp	Glu	Pro	Leu	His
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Ala	Ala	Ala	Phe	Trp	Gly	Gln	Met	Gln	Met	Ala	Glu	Leu	Leu	Val	Ser
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His	Gly	Ala	Ser	Leu	Ser	Ala	Arg	Thr	Ser	Met	Asp	Glu	Met	Pro	Ile
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Asp	Leu	Cys	Glu	Glu	Glu	Glu	Phe	Lys	Val	Leu	Leu	Leu	Glu	Leu	Lys
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Leu	Ser	Arg	Arg	Thr	Ser	Ser	Ala	Gly	Ser	Arg	Gly	Lys	Val	Val	Arg
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Arg	Ala	Ser	Leu	Ser	Asp	Arg	Thr	Asn	Leu	Tyr	Arg	Lys	Glu	Tyr	Glu
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Pro	Thr	Lys	Ile	Pro	Arg	Gly	Glu	Leu	Asp	Met	Pro	Val	Glu	Asn	Gly
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3171

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&lt;210&gt; 3172

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&lt;212&gt; PRT

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&lt;400&gt; 3172

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Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
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&lt;210&gt; 3173

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3173

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 Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val Arg Ser Ala Asn  
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 Glu Met Ala His Val Thr Gly Arg  
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<210> 3175  
 <211> 948  
 <212> DNA  
 <213> Homo sapiens

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 240  
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 300  
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 360  
 ggctgggtcc ggcgcctgag cagccggcc ggcgtgcagg tcatccttcg ccgaatgctc  
 420

aagggccgca agtcgctgag ccattgagga tcgcgacgca gtcggcggga ccctcatgga  
 480  
 agcatcgccc tcgcctcgga ccttgccctgg cgctatTTTT gcagggagct ggggagcagg  
 540  
 aacgcctcgg acctgagtgc tctccatatt gtgggggtga agtctggatg ggagcttgcc  
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 840  
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<210> 3176

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3176

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			20					25					30		
Pro	Asp	Ala	Trp	Gly	Leu	Pro	Thr	Pro	Gln	Gln	Ala	Arg	Gly	Lys	Ala
			35				40					45			
Arg	Gly	Asn	Glu	Tyr	Gln	Pro	Ser	Asn	Ile	Lys	Arg	Lys	Asn	Lys	His
	50					55					60				
Gly	Trp	Val	Arg	Arg	Leu	Ser	Thr	Pro	Ala	Gly	Val	Gln	Val	Ile	Leu
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<210> 3177

<211> 1857

<212> DNA

<213> Homo sapiens

<400> 3177

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1740  
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1857

&lt;210&gt; 3178



<211> 273  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro  
 50 55 60  
 Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu  
 65 70 75 80  
 Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu  
 85 90 95  
 Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu  
 100 105 110  
 Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile  
 115 120 125  
 Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp  
 130 135 140  
 Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu  
 145 150 155 160  
 Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His  
 165 170 175  
 Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val  
 180 185 190  
 His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu  
 195 200 205  
 Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln  
 210 215 220  
 Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu  
 225 230 235 240  
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 Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val  
 260 265 270  
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<210> 3179  
 <211> 3447  
 <212> DNA  
 <213> Homo sapiens

<400> 3179  
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 180

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420  
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540  
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600  
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660  
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720  
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1800

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<211> 127  
<212> PRT  
<213> Homo sapiens

<400> 3180  
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Ala Phe Thr Pro Thr Gly Lys Val Lys Leu Thr Phe Val Phe Leu Phe  
35 40 45  
Asn Asn Phe Met Ile Asn Lys Glu Leu Gln Leu Glu Thr Lys Ala Asn  
50 55 60  
Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala  
65 70 75 80  
Cys Tyr Gln Asn Glu Ala Leu Cys Ser Thr Leu Tyr Ser Lys Ala Phe  
85 90 95  
Tyr Ala Pro Thr Arg Pro Ser Gly Ile Pro Glu Ser Ala Leu His Thr  
100 105 110  
Gly Arg Lys Thr Ala Ser Ser Tyr Arg Leu Cys Glu Asn Thr Gln  
115 120 125

<210> 3181  
<211> 287  
<212> DNA  
<213> Homo sapiens

<400> 3181  
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240  
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287

<210> 3182  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 3182  
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<400> 3183  
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<210> 3184

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3184

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			20					25					30		
Gln	Thr	Gln	Leu	Leu	Val	Pro	Lys	Lys	Val	Leu	Pro	Glu	Ser	Cys	Arg
		35				40					45				
Leu	Ser	Trp	Asn	Leu	Leu	Gly	Asp	Glu	Ala	Ala	Ala	Glu	Leu	Ala	Gln
	50					55					60				
Val	Leu	Pro	Gln	Met	Gly	Arg	Leu	Lys	Arg	Val	Asp	Leu	Glu	Lys	Asn
65					70					75				80	
Gln	Ile	Thr	Ala	Leu	Gly	Ala	Trp	Leu	Leu	Ala	Glu	Gly	Leu	Ala	Gln
			85					90						95	
Gly	Ser	Ser	Ile	Gln	Val	Ile	Arg	Leu	Trp	Asn	Asn	Pro	Ile	Pro	Cys
			100					105					110		
Asp	Met	Ala	Gln	His	Leu	Lys	Ser	Gln	Glu	Pro	Arg	Leu	Asp	Phe	Ala
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Phe	Phe	Asp	Asn	Gln	Pro	Gln	Ala	Pro	Trp	Gly	Thr				
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<210> 3185

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 3185

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 cctggtaacc tgaggaggtg tagagcacc agaaggaagg gtaaaagcag ggggcaaagc  
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 240  
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 300  
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 360

caagtgcttg tgtggaggct catgtatgca tgtgtgtata tgcaaagctg cacatgacaa  
 420  
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 480  
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 780  
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<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

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His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
		20					25					30			
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
		35				40					45				
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
	50				55				60						
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65				70					75				80		
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

				85						90					95				
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys				
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<210> 3187  
 <211> 860  
 <212> DNA  
 <213> Homo sapiens

<400> 3187  
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 aagtggctct cccgcctcgg cctcctgagt agctgggatt acagatatgt tcctaaaaca  
 180  
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 240  
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 420  
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 720  
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<210> 3188  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 3188  
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 Glu Val Val Leu Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu  
 35 40 45  
 Val Val Lys Lys Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg



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      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
      115              120

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&lt;210&gt; 3189

&lt;211&gt; 440

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3189

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120
gactccccctt ctgggccagt gctgccctgc tttctctgtc tctttcaggg tgtgctgtcc
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440

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&lt;210&gt; 3190

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3190

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Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
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Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

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<210> 3191  
 <211> 266  
 <212> DNA  
 <213> Homo sapiens

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 266

<210> 3192  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

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 Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser  
 35 40 45  
 Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg  
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 Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser  
 65 70 75 80  
 Pro Ser Ala Ser

<210> 3193  
 <211> 567  
 <212> DNA  
 <213> Homo sapiens

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gctggcctcg tgattcctct ctttccctgc aggccacggt tcacctactt ccccttctcc  
 420  
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<210> 3194

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3194

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Lys	Cys	Pro	Ala	Pro	Gly	Ser	Lys	Ser	Val	Phe	Ile	Gln	Thr	Trp	Val
			20					25					30		
Asn	Tyr	Cys	Leu	Pro	Tyr	Val	Val	Pro	Val	Gly	Thr	Pro	Gly	Ala	Ala
		35				40						45			
Gly	Leu	Val	Ile	Pro	Leu	Phe	Pro	Cys	Arg	Pro	Arg	Phe	Thr	Tyr	Phe
	50					55					60				
Pro	Phe	Ser	Leu	Gly	His	Arg	Ser	Cys	Ile	Gly	Gln	Gln	Phe	Ala	Gln
65					70					75					80
Met	Glu	Val	Lys	Val	Val	Met	Ala	Lys	Leu	Leu	Gln	Arg	Leu	Glu	Phe
				85						90				95	
Arg	Leu	Val	Pro	Gly	Gln	Arg	Phe	Gly	Leu	Gln	Glu	Gln	Ala	Thr	Leu
			100					105						110	
Lys	Pro	Leu	Asp												
			115												

<210> 3195

<211> 987

<212> DNA

<213> Homo sapiens

<400> 3195

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 987

&lt;210&gt; 3196

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3196

Met	Glu	Glu	Pro	Leu	Gly	Ser	Asp	Pro	Phe	Ser	Trp	Lys	Leu	Pro	Ser
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Leu	Asp	Tyr	Glu	Arg	Lys	Thr	Lys	Val	Asp	Phe	Asp	Asp	Phe	Leu	Pro
		20						25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
		35					40					45			
Gly	Gly	Gln	Asp	Gly	Ser	Gln	Arg	Ser	Ser	Ile	His	Phe	Glu	Thr	Glu
	50					55					60				
Glu	Ala	Asn	Arg	Ser	Phe	Leu	Ser	Gly	Ile	Lys	Thr	Ile	Leu	Lys	Lys
65					70					75				80	
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
				85					90					95	
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
		100						105					110		
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
		115					120					125			
Pro	Glu	Arg	Arg	Glu	Pro	Gly	Thr	Gly	Arg	Lys	Asp	Asp	Asp	Val	Ala
	130					135					140				
Ser	Ile	Met	Lys	Lys	Tyr	Leu	Gln	Lys							
145						150									

&lt;210&gt; 3197

&lt;211&gt; 5575

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3197

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<210> 3198

<211> 833

<212> PRT

<213> Homo sapiens

<400> 3198

Met	Ala	Thr	Leu	Asp	Arg	Lys	Val	Pro	Ser	Pro	Glu	Ala	Phe	Leu	Gly
1				5					10					15	
Lys	Pro	Trp	Ser	Trp	Ile	Asp	Ala	Ala	Lys	Leu	His	Cys	Ser	Asp	
			20				25					30			
Asn	Val	Asp	Leu	Glu	Glu	Ala	Gly	Lys	Glu	Gly	Gly	Lys	Ser	Arg	Glu
		35				40						45			
Val	Met	Arg	Leu	Asn	Lys	Glu	Asp	Met	His	Leu	Phe	Gly	His	Tyr	Pro
	50				55					60					
Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
65					70					75				80	
Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
			85						90					95	
Met	Cys	Arg	Pro	Ser	Pro	Ser	Pro	Val	Ser	Pro	Ala	Ser	Asn	Pro	Arg
			100					105					110		
Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
			115				120					125			
Ser	Ala	Ser	Ser	Thr	Ser	Lys	Pro	Phe	Lys	Thr	Pro	Lys	Asp	Asn	Leu
	130					135					140				
Leu	Thr	Ser	Ser	Ser	Lys	Gln	His	Thr	Val	Phe	Pro	Ala	Lys	Gly	Ser
145					150					155				160	
Arg	Asp	Lys	Pro	Cys	Val	Pro	Val	Pro	Val	Val	Ser	Leu	Glu	Lys	Ile
			165					170						175	
Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
		180						185					190		
Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser



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      195              200              205
Thr Pro Pro Leu Ile Lys Pro Val Leu Met Ser Lys Ser Val Pro Pro
  210              215              220
Ser Pro Glu Lys Ile Leu Asn Gly Lys Gly Ile Leu Pro Thr Thr Ile
  225              230              235              240
Asp Lys Lys His Gln Asn Gly Thr Lys Asn Ser Asn Lys Pro Tyr Arg
      245              250              255
Arg Leu Ser Glu Arg Glu Phe Asp Pro Asn Lys His Cys Gly Val Leu
      260              265              270
Asp Pro Glu Thr Lys Lys Pro Cys Thr Arg Ser Leu Thr Cys Lys Thr
      275              280              285
His Ser Leu Ser His Arg Arg Ala Val Pro Gly Arg Lys Lys Gln Phe
      290              295              300
Asp Leu Leu Leu Ala Glu His Lys Ala Lys Ser Arg Glu Lys Glu Val
  305              310              315              320
Lys Asp Lys Glu His Leu Leu Thr Ser Thr Arg Glu Ile Leu Pro Ser
      325              330              335
Gln Ser Gly Pro Ala Gln Asp Ser Leu Leu Gly Ser Ser Gly Ser Ser
      340              345              350
Gly Pro Glu Pro Lys Val Ala Ser Pro Ala Lys Ser Arg Pro Pro Asn
      355              360              365
Ser Val Leu Pro Arg Pro Ser Ser Ala Asn Ser Ile Ser Ser Ser Thr
      370              375              380
Ser Ser Asn His Ser Gly His Thr Pro Glu Pro Pro Leu Pro Pro Val
  385              390              395              400
Gly Gly Asp Leu Ala Ser Arg Leu Ser Ser Asp Glu Gly Glu Met Asp
      405              410              415
Gly Ala Asp Glu Ser Glu Lys Leu Asp Cys Gln Phe Ser Thr His His
      420              425              430
Pro Arg Pro Leu Ala Phe Cys Ser Phe Gly Ser Arg Leu Met Gly Arg
      435              440              445
Gly Tyr Tyr Val Phe Asp Arg Arg Trp Asp Arg Phe Arg Phe Ala Leu
      450              455              460
Asn Ser Met Val Glu Lys His Leu Asn Ser Gln Met Trp Lys Lys Ile
  465              470              475              480
Pro Pro Ala Ala Asp Ser Pro Met Pro Ser Pro Ala Ala His Ile Thr
      485              490              495
Thr Pro Val Pro Ala Ser Val Leu Gln Pro Phe Ser Asn Pro Ser Ala
      500              505              510
Val Tyr Leu Pro Ser Ala Pro Ile Ser Ser Arg Leu Thr Ser Ser Tyr
      515              520              525
Ile Met Thr Ser Ala Met Leu Ser Asp Ala Ala Phe Val Thr Ser Pro
      530              535              540
Asp Pro Ser Ala Leu Met Ser His Thr Thr Ala Phe Pro His Val Ala
  545              550              555              560
Ala Thr Leu Ser Ile Met Asp Ser Thr Phe Lys Ala Pro Ser Ala Val
      565              570              575
Ser Pro Ile Pro Ala Val Ile Pro Ser Pro Ser His Lys Pro Ser Lys
      580              585              590
Thr Lys Thr Ser Lys Ser Ser Lys Val Lys Asp Leu Ser Thr Arg Ser
      595              600              605
Asp Glu Ser Pro Ser Asn Lys Lys Arg Lys Pro Gln Ser Ser Thr Ser
      610              615              620
Ser Ser Ser Ser Ser Ser Ser Ser Ser Leu Gln Thr Ser Leu Ser Ser

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625                      630                      635                      640  
 Pro Leu Ser Gly Pro His Lys Lys Asn Cys Val Leu Asn Ala Ser Ser  
                                  645                      650                      655  
 Ala Leu Asn Ser Tyr Gln Ala Ala Pro Pro Tyr Asn Ser Leu Ser Val  
                                  660                      665                      670  
 His Asn Ser Asn Asn Gly Val Ser Pro Leu Ser Ala Lys Leu Glu Pro  
                                  675                      680                      685  
 Ser Gly Arg Thr Ser Leu Pro Gly Gly Pro Ala Asp Ile Val Arg Gln  
                                  690                      695                      700  
 Val Gly Ala Val Gly Gly Ser Ser Asp Ser Cys Pro Leu Ser Val Pro  
 705                      710                      715                      720  
 Ser Leu Ala Leu His Ala Gly Asp Leu Ser Leu Ala Ser His Asn Ala  
                                  725                      730                      735  
 Val Ser Ser Leu Pro Leu Ser Phe Asp Lys Ser Glu Gly Lys Lys Arg  
                                  740                      745                      750  
 Lys Asn Ser Ser Ser Ser Ser Lys Ala Cys Lys Ile Thr Lys Met Pro  
                                  755                      760                      765  
 Gly Met Asn Ser Val His Lys Lys Asn Pro Pro Ser Leu Leu Ala Pro  
                                  770                      775                      780  
 Val Pro Asp Pro Val Asn Ser Thr Ser Ser Arg Gln Val Gly Lys Asn  
 785                      790                      795                      800  
 Ser Ser Leu Ala Leu Ser Gln Ser Ser Pro Ser Ser Ile Ser Ser Pro  
                                  805                      810                      815  
 Gly His Ser Arg Gln Asn Thr Asn Arg Thr Gly Arg Ile Arg Thr Leu  
                                  820                      825                      830  
 Pro

<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3199

acgcgtgagg tccggccact gcgcagtcag acacgccggc tgctgcagtg gggcaggcag  
 60  
 ctccagggtgc tggtaggggc cccagctctc tgcgaggctg tggctggacc aggcatacag  
 120  
 caagcagctc ccacagctgg cactggggaa cgtggtgaca ccagaagct tggagatgcc  
 180  
 aggaaccgca aggcccaaa gagagtgtca cagccctggc ttagggagct cctaggtctg  
 240  
 ggctgcccga agagcaaggg ctcttccttc cttctttctt ttctccttct tgctacctgc  
 300  
 aacatggcga gcaaggggca tgtctcagcc ctgtttgtga tacagctctt ttagccctgc  
 360  
 catccagtgg gtcctgagtt cttgtccggc aaccaggaag aatgaggtac ccagacaagt  
 420  
 gtagagtgc caagacaaag aggagcttta ctgagtgcata atagctcaga ggaggccctg  
 480  
 gagagggcag ttctcacta cagctgggtca tccgacgtct gctcagctct ggctgagcct  
 540  
 ggggcttctg tcagcctcag agagggggaa gttcatgctg actgggtccat gggcggccat  
 600

gggcaggccc agaaaaggca acacaagttc gactccagt ccacggcact gacagcctgg  
 660  
 ccccagcct tcagggcctc cctggcctga aggtgggcct caccaggac tcaccccctt  
 720  
 ctgcccagaa acctgtctgc ctctgctgc cattcatggc gcccaggcta taggtat  
 777

<210> 3200

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3200

Met	Leu	Gln	Val	Ala	Arg	Arg	Arg	Lys	Glu	Arg	Arg	Lys	Glu	Glu	Pro
1				5				10					15		
Leu	Leu	Phe	Gly	Gln	Pro	Arg	Pro	Arg	Ser	Ser	Leu	Ser	Gln	Gly	Cys
			20					25					30		
Asp	Thr	Leu	Phe	Gly	Ala	Leu	Arg	Phe	Leu	Ala	Ser	Pro	Ser	Phe	Trp
			35				40					45			
Val	Ser	Pro	Arg	Ser	Pro	Val	Pro	Ala	Val	Gly	Ala	Ala	Cys	Cys	Met
			50			55				60					
Pro	Gly	Pro	Ala	Thr	Ala	Ser	Gln	Arg	Ala	Gly	Ala	Leu	Thr	Ser	Thr
65				70						75				80	
Trp	Ser	Cys	Leu	Pro	His	Cys	Ser	Ser	Arg	Arg	Val				
				85					90						

<210> 3201

<211> 390

<212> DNA

<213> Homo sapiens

<400> 3201

acacgcgcag tgcgtctect actgaacccg agcccctgct atgggtacgc ggaagcagct  
 60  
 cccgtcgcgc ctgccccagg ctggacggaa gggccacgct gcagccgggg tgagcacagc  
 120  
 gaagccgaca gcctttggga ccgaggtcag cagctgcacc ggcgcaagaa ttccaaacac  
 180  
 agctgtggct gaagggcctg ggggtgtgca ggtcccaaac cccagtgagc ctgatcccga  
 240  
 catgggtcct gtctcctggg ggccaccttt gtgtcccgtg gtggtgacc ctgagagggg  
 300  
 gggctgtggg gatgctcaca tgacactggg gtcccagcga cagccctcc tcacgtgcg  
 360  
 tgtccctggg gcctctcagg agggacgcgt  
 390

<210> 3202

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3202

Met Gly Thr Arg Lys Gln Leu Pro Ser Arg Leu Pro Gln Ala Gly Arg

```

      1             5             10             15
Lys Gly His Ala Ala Ala Gly Val Ser Thr Ala Lys Pro Thr Ala Phe
      20             25             30
Gly Thr Glu Val Ser Ser Cys Thr Gly Ala Arg Ile Pro Asn Thr Ala
      35             40             45
Val Ala Glu Gly Pro Gly Gly Val Gln Val Pro Asn Pro Ser Glu Pro
      50             55             60
Asp Pro Asp Met Gly Pro Val Ser Trp Gly Pro Pro Leu Cys Pro Val
      65             70             75             80
Val Ala Asp Pro Glu Arg Glu Gly Cys Gly Asp Ala His Met Thr Leu
      85             90             95
Gly Ser Gln Arg Gln Pro Leu Leu Thr Leu Arg Val Pro Gly Ala Ser
      100             105             110
Gln Glu Gly Arg
      115

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&lt;210&gt; 3203

&lt;211&gt; 1906

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3203

```

ngaattcggc acgagctcgt gccgaatcgg caccgagcgcg ggcccaggag cggcaggact
60
cggggccggag cgtggccgga cccccacccg ccgagggggcc cagggaggac gcggcagagt
120
cacggtggca gcattgagag ttggacaccc gggtccttga agtgatctct aggccccagc
180
cccaaattcc ccaccattcc gtgctgcggg gacaccatgg ctccagaaga ggacgctgga
240
ggggaggcct tagggggcag tttctgggag gctggcaact acaggcgcac ggtacagcgg
300
gtggaggacg ggcaccggct gtgcggggac ctggctcagct gcttccagga gcgcgcccgc
360
atcagaagc cttatgccc gcaattggct gactggggcc gaaagtggag ggggaccgtg
420
gagaagggcc ccagtatgg cactctggag aaggcctggc atgccttttt caggcgggct
480
gagcggctga gcgcgctgca cctggagggtg cgggagaagc tgcaagggca ggacagtga
540
cgggtgcgcg cctggcagcg gggggctttc caccggcctg tgctgggcgg cttccgcgag
600
agccggggcg cagaggacgg cttccgcaag gccagaagc cctggctgaa gaggctgaag
660
gaggttgagg cttccaagaa aagctaccac gcagcccgga aggatgagaa gaccgcccag
720
acgagggaga gccacgcaaa ggcagacagc gccgtctccc aggagcagct gcgcaaactg
780
caggaacggg tggaacgctg tgccaaggag gccgagaaga caaaagctca gtatgagcag
840
acgctggcag agctgcatcg ctacactcca cgctacatgg aggacatgga acaggccttt
900
gagacctgcc aggccgccga gcgccagcgg cttcttttct tcaaggatat gctgctcacc
960

```

ttacaccagc acctggacct ttccagcagt gagaagttcc atgaactcca ccgtgacttg  
 1020  
 caccagggca ttgaggcagc cagtgcagaa gaggatctgc gctgggtggcg cagcaccac  
 1080  
 gggccaggca tggccatgaa ctggccacag ttcgaggagt ggtccttgga cacacagagg  
 1140  
 acaatcagcc ggaaagagaa ggggtggccgg agccctgatg aggttacctt gaccagcatt  
 1200  
 gtgcctacaa gagatggcac cgcaccccca cccagtcctc cgggggtccc aggcacgggg  
 1260  
 caggatgagg agtggtcaga tgaagagagt ccccggaagg ctgccaccgg ggttcgggtg  
 1320  
 agggcactct atgactacgc tggccaggaa gctgatgagc tgagcttccg agcaggggag  
 1380  
 gagctgctga agatgagtga ggaggacgag cagggtggtt gccaaaggcca gttgcagagt  
 1440  
 ggccgcattg gcctgtaccc tgccaactac gtggagtgtg tgggcgcctg agtgtcctga  
 1500  
 cagcccttct gcaacgttta cccaccctgg ttcagagccc agcttctcct ggagagccgg  
 1560  
 accctcaggg ccctgaaccg tcgctctctg gctgctctc tgctccttga gggaggaagt  
 1620  
 cctgggaccc agggagggga ggggcctttg tctagggag ggactggtag ggaagggacg  
 1680  
 agtctaggct gagggcaaga tgggaggtca gaggtgacag aagcggttcag ggggtgcctg  
 1740  
 gcctcccag gagctgtgga ctcaattcct gacctctgct ttgggggttcc tgggggtggc  
 1800  
 ttgggggtgag tgtagttctg gcctagcagc accctcttgt ggcttgttct agcgtgtatt  
 1860  
 aaaacttgac acacaccac acacaaaaac aaaaacacca aaaaaa  
 1906

&lt;210&gt; 3204

&lt;211&gt; 424

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3204

Met Ala Pro Glu Glu Asp Ala Gly Gly Glu Ala Leu Gly Gly Ser Phe  
 1 5 10 15  
 Trp Glu Ala Gly Asn Tyr Arg Arg Thr Val Gln Arg Val Glu Asp Gly  
 20 25 30  
 His Arg Leu Cys Gly Asp Leu Val Ser Cys Phe Gln Glu Arg Ala Arg  
 35 40 45  
 Ile Glu Lys Ala Tyr Ala Gln Gln Leu Ala Asp Trp Ala Arg Lys Trp  
 50 55 60  
 Arg Gly Thr Val Glu Lys Gly Pro Gln Tyr Gly Thr Leu Glu Lys Ala  
 65 70 75 80  
 Trp His Ala Phe Phe Thr Ala Ala Glu Arg Leu Ser Ala Leu His Leu  
 85 90 95  
 Glu Val Arg Glu Lys Leu Gln Gly Gln Asp Ser Glu Arg Val Arg Ala  
 100 105 110  
 Trp Gln Arg Gly Ala Phe His Arg Pro Val Leu Gly Gly Phe Arg Glu

```

      115              120              125
Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu
      130              135              140
Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala
      145              150              155              160
Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala
      165              170              175
Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val
      180              185              190
Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln
      195              200              205
Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met
      210              215              220
Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu
      225              230              235              240
Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser
      245              250              255
Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile
      260              265              270
Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His
      275              280              285
Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu
      290              295              300
Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro
      305              310              315              320
Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala
      325              330              335
Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu
      340              345              350
Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val
      355              360              365
Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe
      370              375              380
Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly
      385              390              395              400
Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala
      405              410              415
Asn Tyr Val Glu Cys Val Gly Ala
      420

```

&lt;210&gt; 3205

&lt;211&gt; 1482

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3205

```

nnggagatgg agggaaacctc cccgagcagc ccaccaccca gtgggggtgcg gtcccccccg
60
ggtctggcca agacaccctt atctgctctg ggctgaaac ctcacaaccc agcggacatc
120
ctgttgccac ccacaggaga gccccggagc tatgtggagt ctgtggcacg gacagcggtg
180
gctggacccc gagctcagga ctctgagccc aagagcttta gtgctccagc caccagggcc
240

```

tatggccatg agatacccct gaggaacggg accctgggtg gtcctttgt cteccccagc  
 300  
 cccctctcca ccagcagccc catcctcagt gctgacagca cttcagtggg gagtttcccc  
 360  
 tcgggagaga gcagtgaacca gggccccggg acgcccaccc agcctctgtt ggagtctggc  
 420  
 ttccgctcag gcagcctggg acagcccagc ccgtctgccc agagaaacta ccagagctct  
 480  
 tctcctctcc cgactgtggg cagtagctac agcagccccg actactcact tcagcatttc  
 540  
 agtcctctc cggaagcca ggctcgagct cagttcagtg tggctggcgt ccacacggtg  
 600  
 cctgggagcc ctcaggcgcg tcacagaaca gtgggcacca aactcccc tagtcctggc  
 660  
 ttccgctggc gggccatcaa tcccagcatg gctgccccca gcagtcccag tttgagccat  
 720  
 caccagatga tgggtccacc aggcactggc ttccatggta gcactgtctc cagccccag  
 780  
 agcagtgcag cgaccacccc ggggagcccc agcctgtgtc ggcacccagc aggggtctac  
 840  
 caggtttctg gcctccacaa caaagtggcc accaccccg gtagtcccag cctgggcccg  
 900  
 caccctgggg ctcaccaagg caacctggcc tccggtcttc atagcaatgc aatagccagc  
 960  
 cctggaagcc ccagcctggg ccgtcacctc ggagggtctg gatctgtggt tcccggcagc  
 1020  
 ccctgcttgg accggcatgt ggcctatggc ggctattcta cccggagga tcggagaccc  
 1080  
 aactgtccc ggcagagcag tgctctggc taccaggctc cttccacgcc ctccttcct  
 1140  
 gtctcccctg cctactaccc tggcctgagc agcctgcca cctccccgtc accagactcc  
 1200  
 gcagccttcc ggcaaggag cccaacacca gccttgccag agaagcgaag gatgtcagt  
 1260  
 ggagaccggg caggcagcct cccaactat gccaccatca atgggaaggt gtcttcgct  
 1320  
 gtccgagcg gcatgtccag tcccagtggg ggcagcaccg tctccttctc ccacactctg  
 1380  
 cccgacttct ccaagtactc catgccagac aacagcccg agacgcgggc taaagtgaag  
 1440  
 tttgtccagg acatttctaa gtattggtac aagcctaaga tc  
 1482

&lt;210&gt; 3206

&lt;211&gt; 494

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3206

Xaa Glu Met Glu Gly Thr Ser Pro Ser Ser Pro Pro Pro Ser Gly Val  
 1 5 10 15  
 Arg Ser Pro Pro Gly Leu Ala Lys Thr Pro Leu Ser Ala Leu Gly Leu  
 20 25 30  
 Lys Pro His Asn Pro Ala Asp Ile Leu Leu His Pro Thr Gly Glu Pro

```

      35              40              45
Arg Ser Tyr Val Glu Ser Val Ala Arg Thr Ala Val Ala Gly Pro Arg
  50              55              60
Ala Gln Asp Ser Glu Pro Lys Ser Phe Ser Ala Pro Ala Thr Gln Ala
  65              70              75              80
Tyr Gly His Glu Ile Pro Leu Arg Asn Gly Thr Leu Gly Gly Ser Phe
      85              90              95
Val Ser Pro Ser Pro Leu Ser Thr Ser Ser Pro Ile Leu Ser Ala Asp
      100              105              110
Ser Thr Ser Val Gly Ser Phe Pro Ser Gly Glu Ser Ser Asp Gln Gly
      115              120              125
Pro Arg Thr Pro Thr Gln Pro Leu Leu Glu Ser Gly Phe Arg Ser Gly
      130              135              140
Ser Leu Gly Gln Pro Ser Pro Ser Ala Gln Arg Asn Tyr Gln Ser Ser
  145              150              155              160
Ser Pro Leu Pro Thr Val Gly Ser Ser Tyr Ser Ser Pro Asp Tyr Ser
      165              170              175
Leu Gln His Phe Ser Ser Ser Pro Glu Ser Gln Ala Arg Ala Gln Phe
      180              185              190
Ser Val Ala Gly Val His Thr Val Pro Gly Ser Pro Gln Ala Arg His
      195              200              205
Arg Thr Val Gly Thr Asn Thr Pro Pro Ser Pro Gly Phe Gly Trp Arg
      210              215              220
Ala Ile Asn Pro Ser Met Ala Ala Pro Ser Ser Pro Ser Leu Ser His
  225              230              235              240
His Gln Met Met Gly Pro Pro Gly Thr Gly Phe His Gly Ser Thr Val
      245              250              255
Ser Ser Pro Gln Ser Ser Ala Ala Thr Thr Pro Gly Ser Pro Ser Leu
      260              265              270
Cys Arg His Pro Ala Gly Val Tyr Gln Val Ser Gly Leu His Asn Lys
      275              280              285
Val Ala Thr Thr Pro Gly Ser Pro Ser Leu Gly Arg His Pro Gly Ala
      290              295              300
His Gln Gly Asn Leu Ala Ser Gly Leu His Ser Asn Ala Ile Ala Ser
  305              310              315              320
Pro Gly Ser Pro Ser Leu Gly Arg His Leu Gly Gly Ser Gly Ser Val
      325              330              335
Val Pro Gly Ser Pro Cys Leu Asp Arg His Val Ala Tyr Gly Gly Tyr
      340              345              350
Ser Thr Pro Glu Asp Arg Arg Pro Thr Leu Ser Arg Gln Ser Ser Ala
      355              360              365
Ser Gly Tyr Gln Ala Pro Ser Thr Pro Ser Phe Pro Val Ser Pro Ala
      370              375              380
Tyr Tyr Pro Gly Leu Ser Ser Pro Ala Thr Ser Pro Ser Pro Asp Ser
  385              390              395              400
Ala Ala Phe Arg Gln Gly Ser Pro Thr Pro Ala Leu Pro Glu Lys Arg
      405              410              415
Arg Met Ser Val Gly Asp Arg Ala Gly Ser Leu Pro Asn Tyr Ala Thr
      420              425              430
Ile Asn Gly Lys Val Ser Ser Pro Val Ala Ser Gly Met Ser Ser Pro
      435              440              445
Ser Gly Gly Ser Thr Val Ser Phe Ser His Thr Leu Pro Asp Phe Ser
      450              455              460
Lys Tyr Ser Met Pro Asp Asn Ser Pro Glu Thr Arg Ala Lys Val Lys

```



```
<210> 3209
<211> 346
<212> DNA
<213> Homo sapiens
```

&lt;400&gt; 3209

tgttcctcta ggtggggcag gtagggggtc cagcttcctg cttgctgggtg gttcagggtca  
 60  
 tgcgtccagc cttgtccctt ctgacctggg ccctaccac ggggaaatgt tcccatagca  
 120  
 gaagaatcag cccacagtg caggggtgtg ttagtgggga acgggctctg ggctcctgtg  
 180  
 ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt  
 240  
 gtctgtcttg gccctgtgtg tcaccctgtg ttcattcttc tcccagccat ggcctctcaa  
 300  
 actgggggtt tegtctcct atgagggggg cctgggtatgt acgcgt  
 346

&lt;210&gt; 3210

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3210

Met	Arg	Pro	Ala	Leu	Ser	Leu	Leu	Thr	Trp	Ala	Leu	Pro	Thr	Gly	Lys
1				5					10					15	
Cys	Ser	His	Ser	Arg	Arg	Ile	Ser	Pro	Thr	Val	Gln	Gly	Cys	Val	Ser
			20					25					30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
			35				40					45			
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
	50					55					60				
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65					70					75				80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
				85					90					95	

&lt;210&gt; 3211

&lt;211&gt; 1728

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3211

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 tggacaaaag attccaagtc gatagcccag gccaaagaaa gcgcagggga caactccagt  
 120  
 gtttccttgg ccatacgtgca agccagtccg aaggaccagg gactctatta ctgctgcac  
 180  
 aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag  
 240  
 ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aatcatctt  
 300  
 caaagaagac ttcctccatg acagctactt tgggggccgc ctgcgtgggtc agatcgccac  
 360  
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 420

cggcctcatg cctgtettca aacctggcca tgccgtgtg cctaaggtgc acaatgccat  
 480  
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgcccc  
 540  
 ggaatgctat gttcaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca  
 600  
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcggcc  
 660  
 tgagaacaat atcccgtatg ctacagtga ggaggagctg attggagaat ttgtgaagta  
 720  
 ttccatcagg gatgggaaag aaataaactt cttgagaaga gaatcagaag ctggtcagaa  
 780  
 atgttgacc ttccagcact ggggtgtacca gaaaacaagt ggctgcctcc tggtagcggg  
 840  
 catgcaagg gtaggaatga agctaactga cgttggcata gcaacgctgg ctaaagggtg  
 900  
 caagggattt aaaggcaact gttccatgac cttcattgat cagtttaaag cactacacca  
 960  
 gtgtaacaag tattgcaaaa tgctgggact gaaatccctt caaaacaaca accagaaaca  
 1020  
 gaagcagccg agcattggga aaagcaaagt tcaaacaac tctatgacag taaagaaggc  
 1080  
 agggcctgag accccaggcg aaaagaaaac ctaacgtccc cgggtaacct aatggccact  
 1140  
 ggctagcagc acacaatctc gccagggaaa atctgaggcc acacaggaga gaatatacag  
 1200  
 cctgcagaga gtgcgtggca atccttactc ccagccgact gtgcgccaag atgcttctaa  
 1260  
 acccatcacc tgctgtcttc actcaaatga tttcagaaca ggatttgca ccagggttat  
 1320  
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 1380  
 atttttacca acctcacatc atgtgtatat ttgtgtattt gcacatgggt gtgctgtcga  
 1440  
 ggacctgggt ctgagaagag tctgttcaca gccaaaatc ttcccactgt cattcctaac  
 1500  
 ctgggatttc tagacacatc ctgctgtgat gtaaacagaa atcacgaatt cgctcactgg  
 1560  
 atcaagtgtg tccactgggt tctaatacgc tattgttgcc ggaggtgggt tctgtgacgt  
 1620  
 gaagccattt cccatcattc aacagccagt tacaattttc tgtttaatta aattcatatt  
 1680  
 taaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1728

&lt;210&gt; 3212

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3212

Ser Gly Asn Ile Lys Leu Ser Tyr Gln Phe Ser Glu Ile His Glu Asp  
 1 5 10 15  
 Ser Thr Val Cys Trp Thr Lys Asp Ser Lys Ser Ile Ala Gln Ala Lys

```

      20      25      30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
      35      40      45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
      50      55      60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
65      70      75      80
Leu Ser Ser His Thr Glu Tyr
      85

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&lt;210&gt; 3213

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3213

```

acgcgtgaag gggaagcggc ggggtagtaa cagattatgg gcaacagtcc ttttaattaa
60
tctaccgtca tcatggctaa tgaggactgt cccaaggctg ctgatagtcc tttttcatca
120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agttttaaag ctcacggct ggttttggct
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat
300
gttgtaccga ttctaggaat tgaagcagga atctttcaga tacttcta
348

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&lt;210&gt; 3214

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3214

```

Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
1      5      10      15
Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
      20      25      30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
      35      40      45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
      50      55      60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
65      70      75      80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
      85      90

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&lt;210&gt; 3215

&lt;211&gt; 597

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3215

acgcgtgcgc gctccccgca ggagagggcc agccggcccc ggcttaccat cttgaacgtg  
 60  
 tgcaacactg gggacaagat ggtggagtgc cagctggaga cgcacaacca caagatgggtg  
 120  
 accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag  
 180  
 catgacttta tcctgcaggc cgagcgggaa acgttcatcg agcagatgaa ggatgtcatg  
 240  
 gacaaggcag aggacatgct cagcgaggac acagacgccg accgtggctc cgacccaggg  
 300  
 accagcccgc cacacctcag cacctgcggc ctgggcaccg gggaggagag ccgacaatcc  
 360  
 caagccaacg cccccgtgta tcagcagaac gtctctgcaca ccgggaagag gtgggttcac  
 420  
 atctgtccgg tgcttgagcc ccccgcccc gagggccctt gaatcttcgc cccacttcc  
 480  
 tctaagctcc ctgccgccag aagccagcca agattcagcg ccctataaag accagctgtc  
 540  
 ctcgaaggaa caaccagct ttctagccag tcagcagctc ctgggccagg cgggccc  
 597

&lt;210&gt; 3216

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3216

Thr	Arg	Ala	Arg	Ser	Arg	Gln	Glu	Arg	Ala	Ser	Arg	Pro	Arg	Leu	Thr
1				5					10					15	
Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35				40					45				
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
50					55					60					
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65				70					75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
				85				90					95		
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
		100						105				110			
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
		115				120					125				
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
130					135					140					
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145					150										

&lt;210&gt; 3217

&lt;211&gt; 2570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3217

gggggtcaaag ctcgccagta cccttggggt gttgtacaag tggaaaatga aaaccactgt  
60  
gactttgtaa agctgcggga aatgctcatt tgtacaaata tggaggacct gcgagagcag  
120  
accatacca ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca  
180  
gatgtggggc cagaaaacaa gccagtcagt gttcaagaga cctatgaagc caaaagacat  
240  
gagttccatg gtgaacgtca gaggaaggaa gaagaaatga aacagatgtt tgtgcagcga  
300  
gtaaaggaga aagaagccat attgaaagaa gctgagagag agctacaggc caaatttgag  
360  
caccttaaga gacttcacca agaagagaga atgaagcttg aagaacaaag aagacttttg  
420  
gaagaagaaa taattgcttt ctctaaaaag aaagctacct ccgagatatt tcacagccag  
480  
tcctttctgg caacaggcag caacctgagt aaggacaagg accataagaa ctccaatttt  
540  
ttgtaaaaca gaagttccag agcacagaag gtcatcatca caagcaaact ttattaaaaa  
600  
aaaactagaa gtgtgctttg attttgctgt tatttgtttt atcacttcta tatttggtga  
660  
acagccacag ttactgatat ttatggaaaa gtactttcaa gtacaaggtc aatacataag  
720  
ccagagtga tgaactaca agttgagcat ctctaattca aaaatctgaa atccagaagc  
780  
ttcaaaatct gaatcttttt gagcactgac ttgacccac aagtggaaaa ttccccacc  
840  
gacaccttg ctttctgatg gttcagttta aacagatttt gtttcttgca caaaattttt  
900  
gtataaatta ctttcagget atatgtataa ggtggatgtg aaacatgaat tatgtaatta  
960  
gagtcgggtc ccgttggtga tatgcagata ttccaaacct gaaatccaaa acacttctgg  
1020  
tccttagcat tttggataag ggatactcag cttgtacctata tatattcata tatattcact  
1080  
gttgtagaa atgtttaagt tgctgttctg tgatgaatct aaatcttttc tcttgctacc  
1140  
aagctattgt cactgcagtg cattatacca aagagcgaag tcagtgccac tgaaaatata  
1200  
gaaccatta atatcgtggc tatctgatta catttatatt ccaagatgaa ccttttttta  
1260  
tatatgctaa aaattttggg gaatatgttt tgggatgtat tatggagcta aaactctaac  
1320  
ctcttaatatg ttttatagaa cttaaaaatt tttatacaa ttaccaatt ggtgatatga  
1380  
tcttaagctt ttgtgtcaga ttatttaata tgatgacttc atgctttatt atgccttatt  
1440  
atggctgacg tattactgtg gtgaaacaaa atatctttta aagttaaaac atccagatat  
1500  
ataagctatt ttttcctaag gataaagtac ctttgagcat gagtgtatca cagctttcat  
1560  
taggaaaact tttcattaca tacttgttta aactctgtct tccagggtaa aaataataag  
1620

gttgaatcat tttattaaaa atacttttta agaaaataac tatgaacatc tgaatattaa  
 1680  
 agatataaaa atgcacataa ttcataatttc aggtgggtatt tgcattcagt gccttactgg  
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 1800  
 tcattttttg tacttgaata ttctaaataa aactgacatt tactcttgac aaataaaaca  
 1860  
 tatattttact aaaaaaaaaa aaaaaaaacc tcgtgccgaa ttcggagagt ctaggaatac  
 1920  
 tgttaaagga aaaaaaagag gggggaagat caggtcatac tatctactct cctcatctct  
 1980  
 aacagctcag gatctcttag cattttaatt agatgtaatt gtttgtcttt aactgtcaaa  
 2040  
 aagtttggtt ctgtgtctgt gttttaataa gacgagagga cgagcgattg aggtgtatgg  
 2100  
 agagaaaaca gacctaatgc tccttgttcc tagagtagag tggagggagg gtggcctaag  
 2160  
 agttgagctc tcggaactgc atgctgctgg acagtatcac tgtctttcct agatggcagt  
 2220  
 cactgaattc cattttttca aggtaatttc ttgtgcctct aatagcccaa gaatgggagg  
 2280  
 ttgatcagat ctgacatgat tccttctctgt tctgaactgt ggggtgtgca catctctgct  
 2340  
 tgagtcaggt ttgagtagag gcttagagac agttgggtga gaacaaccaa aatcttatca  
 2400  
 tggctcagct cataatcatt agggggaact ctagccaaat ggtttaactt ctgcctgtgg  
 2460  
 aactggggat tgggtgggca ggaaaagggtg atatccattc tttctgataa ctagatgggtg  
 2520  
 ctgagaagct tttgaataaa aactttgcta aatgaaaaaa aaaaaaaaaa  
 2570

&lt;210&gt; 3218

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3218

Gly	Val	Lys	Ala	Arg	Gln	Tyr	Pro	Trp	Gly	Val	Val	Gln	Val	Glu	Asn
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Glu	Asn	His	Cys	Asp	Phe	Val	Lys	Leu	Arg	Glu	Met	Leu	Ile	Cys	Thr
			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35				40						45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro	
	50				55					60					
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
65				70				75						80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
			85				90							95	
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
			100				105						110		
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

	115		120		125	
Glu	Arg	Met	Lys	Leu	Glu	Glu
	130		135		140	
Ile	Ala	Phe	Ser	Lys	Lys	Lys
145			150		155	160
Ser	Phe	Leu	Ala	Thr	Gly	Ser
		165		170		175
Asn	Ser	Asn	Phe	Leu		
		180				

&lt;210&gt; 3219

&lt;211&gt; 1241

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3219

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 60  
 tcctctggac gccacgttgt ccagcccag gttcatgtca atgggtggng cgttacatct  
 120  
 gagcgggaga cagacatcct ggacgatgaa ttgccaaacc aggatggtca cagtgcgggc  
 180  
 agcatgggca cactctcttc tctggacggg gtcaccaaca tcagtgaggg gggctaccca  
 240  
 gaggccctgt cccactgac caacggctctg gacaagtcct accccatgga gcctatggtc  
 300  
 aatggaggag gctacccta cgagtctgcc agccgggcgg ggctgccc tgctggccac  
 360  
 acggccccca tgcggccctc ctactctgca caggagggtt tagctggcta ccagaggag  
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 480  
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 cgagggggaa gcagccggga ggctgtgcaa aggggactga attcgtggca gcagcagcag  
 600  
 cagcagcagc agcagcctcg cccacctcca cgccagcagg aaagagccca cttggagagt  
 660  
 cttgtagcca gcaggcccag cctcagcca ttggcagaga ccccatccc cagtctccct  
 720  
 gagttcccgc gagcagcctc ccagcaggag attgaacagt ccatcgaaac actcaatatg  
 780  
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 840  
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 900  
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 960  
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 1080  
 gcctcttcct ccttgctgc cttcttccg accaccaca gccctccagg gcctcagcaa  
 1140



ccccagcct ctctccctgg cctcactgct cagcctctgc tctcaccaaa ggaagcgact  
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 1241

<210> 3220

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3220

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Leu	Gly	Cys	Ala	Ser	Ser	Gly	Arg	His	Val	Val	Pro	Ala	Gln	Val	His
			20				25						30		
Val	Asn	Gly	Gly	Xaa	Val	Thr	Ser	Glu	Arg	Glu	Thr	Asp	Ile	Leu	Asp
		35				40						45			
Asp	Glu	Leu	Pro	Asn	Gln	Asp	Gly	His	Ser	Ala	Gly	Ser	Met	Gly	Thr
	50				55						60				
Leu	Ser	Ser	Leu	Asp	Gly	Val	Thr	Asn	Ile	Ser	Glu	Gly	Gly	Tyr	Pro
65				70					75					80	
Glu	Ala	Leu	Ser	Pro	Leu	Thr	Asn	Gly	Leu	Asp	Lys	Ser	Tyr	Pro	Met
			85					90						95	
Glu	Pro	Met	Val	Asn	Gly	Gly	Gly	Tyr	Pro	Tyr	Glu	Ser	Ala	Ser	Arg
		100						105					110		
Ala	Gly	Pro	Ala	His	Ala	Gly	His	Thr	Ala	Pro	Met	Arg	Pro	Ser	Tyr
	115					120						125			
Ser	Ala	Gln	Glu	Gly	Leu	Ala	Gly	Tyr	Gln	Arg	Glu	Gly	Pro	His	Pro
	130				135						140				
Ala	Trp	Pro	Gln	Pro	Val	Thr	Thr	Ser	His	Tyr	Ala	His	Asp	Pro	Ser
145				150						155				160	
Gly	Met	Phe	Arg	Ser	Gln	Ser	Phe	Ser	Glu	Ala	Glu	Pro	Gln	Leu	Pro
			165					170						175	
Pro	Ala	Pro	Val	Arg	Gly	Gly	Ser	Ser	Arg	Glu	Ala	Val	Gln	Arg	Gly
		180						185					190		
Leu	Asn	Ser	Trp	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Arg	Pro
	195					200						205			
Pro	Pro	Arg	Gln	Gln	Glu	Arg	Ala	His	Leu	Glu	Ser	Leu	Val	Ala	Ser
	210				215						220				
Arg	Pro	Ser	Pro	Gln	Pro	Leu	Ala	Glu	Thr	Pro	Ile	Pro	Ser	Leu	Pro
225				230						235				240	
Glu	Phe	Pro	Arg	Ala	Ala	Ser	Gln	Gln	Glu	Ile	Glu	Gln	Ser	Ile	Glu
			245					250						255	
Thr	Leu	Asn	Met	Leu	Met	Leu	Asp	Leu	Glu	Pro	Ala	Ser	Ala	Ala	Ala
		260					265						270		
Pro	Leu	His	Lys	Ser	Gln	Ser	Val	Pro	Gly	Ala	Trp	Pro	Gly	Ala	Ser
	275						280					285			
Pro	Leu	Ser	Ser	Gln	Pro	Leu	Ser	Gly	Ser	Ser	Arg	Gln	Ser	His	Pro
	290					295					300				
Leu	Thr	Gln	Ser	Arg	Ser	Gly	Tyr	Ile	Pro	Ser	Gly	His	Ser	Leu	Gly
305				310					315					320	
Thr	Pro	Glu	Pro	Ala	Pro	Arg	Ala	Ser	Leu	Glu	Ser	Val	Pro	Pro	Gly
			325					330					335		
Arg	Ser	Tyr	Ser	Pro	Tyr	Asp	Tyr	Gln	Pro	Cys	Leu	Ala	Gly	Pro	Asn

340						345						350				
Gln	Asp	Phe	His	Ser	Lys	Ser	Pro	Ala	Ser	Ser	Ser	Leu	Pro	Ala	Phe	
355						360						365				
Leu	Pro	Thr	Thr	His	Ser	Pro	Pro	Gly	Pro	Gln	Gln	Pro	Pro	Ala	Ser	
370						375						380				
Leu	Pro	Gly	Leu	Thr	Ala	Gln	Pro	Leu	Leu	Ser	Pro	Lys	Glu	Ala	Thr	
385						390						395				
Ser	Asp	Pro	Ser	Arg	Thr	Pro	Glu	Glu	Glu	Pro	Leu	Asn	400			
405						410										

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<210> 3221
<211> 1585
<212> DNA
<213> Homo sapiens
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<400> 3221  
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120  
gcaggctgga aggagatgcy atgccacctg cgcgccaacg gctacctgtg caagtaccag  
180  
tttgaggtct tgtgtcctgc gccgcgcccc ggggccgcct ctaacttgag ctatcgcgcy  
240  
cccttccagc tgcacagcgc cgctctggac ttcagtccac ctgggaccga ggtgagtgcy  
300  
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360  
tgggacaaac tctcgggcga tgtgttgtgt ccctgccccg ggaggtacct ccgtgctggc  
420  
aaatgcgcag agctccctaa ctgcctagac gacttgggag gctttgcctg cgaatgtgct  
480  
acgggcttcg agctggggaa ggacggccgc tcttgtgtga ccagtgggga aggacagccg  
540  
acccttgggg ggaccgggggt gccaccagg cgcccgccgg cactgcaac cagccccgtg  
600  
ccgcagagaa catggccaat cagggctgcg gagaagctgg gagagacacc acttgtccct  
660  
gaacaagaca attcagtaac atctattcct gagattcctc gatggggatc acagagcacg  
720  
atgtctaccc ttcaaagtgc cttcaagcc gagtcaaagg ccactatcac cccatcaggg  
780  
agcgtgattt ccaagttaa ttctacgact tcctctgcc a tctctcaggc ttctgactcc  
840  
tcctctgccg tggctctcat atttgtgagc acagcagtag tagtgttggg gatcttgacc  
900  
atgacagtac ttgggcttgt caagctctgc ttccacgaaa gccctcttc ccagccaagg  
960  
aaggagtcta tgggcccgcc gggctgtgat gagtgatcct gagcccgctg ctttgggctc  
1020  
cagtttgcac attgcacaaa caatgggggtg aaagtcgggg actgtgatct gcgggacaga  
1080  
gcagaggggt ccttgctgcy gagtccccgt ctttgggctc tagtgatgca tagggaaaca  
1140

ggggacatgg gcactcctgt gaacagtttt tcaacttttga tgaaacgggg aaccaagagg  
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 1320  
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 1440  
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<210> 3222

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3222

Leu	Leu	Ala	Val	Leu	Arg	Pro	Arg	Arg	Ser	Arg	Lys	Arg	His	Val	Gln
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Trp	Val	Glu	Glu	Pro	Gln	Arg	Ser	Cys	Thr	Ala	Arg	Arg	Trp	His	Ile
		20						25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
		35						40				45			
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
		50				55					60				
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
65				70						75				80	
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
			85					90						95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
		100					105						110		
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
		115					120					125			
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
		130				135					140				
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
145				150						155				160	
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
			165					170						175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
		180					185						190		
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
		195					200					205			
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
		210				215					220				
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
225				230						235				240	
Met	Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile

<210> 3224

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3224

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 Ser Asn Pro Asp Ser Leu Ile Phe Gly Ala Leu Thr Ile Met Thr Gly  
 20 25 30  
 Val Ile Gly Val Ile Leu Gly Ala Glu Ala Ser Arg Arg Tyr Lys Lys  
 35 40 45  
 Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala  
 50 55 60  
 Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu  
 65 70 75 80  
 Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys  
 85 90 95  
 Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg  
 100 105 110  
 Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu  
 115 120 125  
 Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu  
 130 135 140  
 Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln  
 145 150 155 160  
 Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe  
 165 170 175  
 Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln  
 180 185 190  
 Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu  
 195 200 205  
 Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro  
 210 215 220

&lt;210&gt; 3225

&lt;211&gt; 506

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3225

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 120  
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 180  
 attctgcctg tttcccagtc cctaaaatgc ctgtgccatg tgcctgggt gaagaactag  
 240  
 tcccatgcc aaggggtaca ggccccgctg tagtttgcc agccaaccg cagcaagggg  
 300  
 aagtggaaacc acagcctcaa cccacacaga ggatggaacc accttctgca gctaaaaata  
 360  
 accacaccgc ctttgagggt agccacccaa gatgcagggt gggctgtatg aaactccacg  
 420

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 480  
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 506

<210> 3226  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 3226  
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 Leu Arg Pro Cys Thr Phe Phe Ile Gln Glu Ala Thr Lys Asn Ser Ala  
 20 25 30  
 Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu  
 35 40 45  
 Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala  
 50 55 60  
 Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg  
 65 70 75 80  
 Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val  
 85 90 95  
 Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly  
 100 105 110  
 Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp  
 115 120 125  
 Pro Trp Arg Cys Pro Trp Phe Pro Met  
 130 135

<210> 3227  
 <211> 1623  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
 gcattcccat cccctctccc ggggcggagg tgaggacctc cttggttcct ttggttctgt  
 240  
 cagttagccc cttccttggc catgaagctc gtgaggaaga acatcgagaa ggacaatgcg  
 300  
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 360  
 caggtggggc acagcctgcg cgcctccacc atccgcaagg tacagacaga gtcctccacg  
 420  
 ggcagcgtgg gcagcaaccg ggtccgcact accctcactc tctgcgtgga ggccatcgac  
 480  
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gtcaagatgg gggcttacca caccatcgag ctggagccca accgccagtt caccctggcc  
 600  
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 660  
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 720  
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 780  
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 840  
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 900  
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 1020  
 aaagaggccc tttgtgaccc tactgtggct agccgccttt cagacactaa agctgctggg  
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 1200  
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 1260  
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 1620  
 aaa  
 1623

&lt;210&gt; 3228

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3228

Met	Lys	Leu	Val	Arg	Lys	Asn	Ile	Glu	Lys	Asp	Asn	Ala	Gly	Gln	Val
1			5					10						15	
Thr	Leu	Val	Pro	Glu	Glu	Pro	Glu	Asp	Met	Trp	His	Thr	Tyr	Asn	Leu
		20					25						30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
		35					40					45			
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
	50					55				60					
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

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65          70          75          80
Leu Arg Val Lys Gly Thr Asn Ile Gln Glu Asn Glu Tyr Val Lys Met
          85          90          95
Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu
          100          105          110
Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala
          115          120          125
Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Ala Val Val Met Gln Glu
          130          135          140
Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg
145          150          155          160
Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser
          165          170          175
Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala
          180          185          190
Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala
          195          200          205
Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln
          210          215          220
Ala Val Lys Thr Asp Asn Lys Leu Leu Leu Glu Asn Arg Ser Lys Phe
225          230          235          240
Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala
          245          250          255
Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala
          260          265          270
Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu
          275          280          285
Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu
          290          295          300
Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His
305          310          315          320
Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val
          325          330          335
Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser
          340          345          350
Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe
          355          360          365
Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser Ser Ser Glu Glu
          370          375          380
Asp
385

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&lt;210&gt; 3229

&lt;211&gt; 1008

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3229

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120
ggccggcctaa ggtgcgcgtg ctcgctggtt ctaacccttc tgttgggcgt ttctgctgag
180

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 1008

&lt;210&gt; 3230

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3230

Met	Glu	Asp	Gly	Lys	Arg	Glu	Arg	Trp	Pro	Thr	Leu	Met	Glu	Arg	Leu
1				5					10					15	
Cys	Ser	Asp	Gly	Phe	Ala	Phe	Pro	Gln	Tyr	Pro	Ile	Lys	Pro	Tyr	His
			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
			35				40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
	50					55					60				
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65					70					75					80
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
				85					90					95	
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100					105					110		
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
		115				120						125			
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
	130					135					140				
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

145		150		155		160									
Ser	Lys	Asn	Glu	Tyr	Gln	Pro	Leu	Leu	Leu	Ala	Val	Ser	Arg	Arg	Lys
					165				170					175	
Val	Lys	Met	Val	Glu	Phe	Leu	Leu	Lys	Lys	Lys	Ala	Asn	Val	Asn	Ala
			180					185					190		
Ile	Asp	Tyr	Leu	Gly	Arg	Ser	Ala	Leu	Ile	Leu	Ala	Val	Thr	Leu	Gly
		195				200						205			
Glu	Lys	Asp	Ile	Val	Ile	Leu	Leu	Leu	Gln	His	Asn	Ile	Asp	Val	Phe
	210					215					220				
Ser	Arg	Asp	Val	Tyr	Gly	Lys	Leu								
225					230										

&lt;210&gt; 3231

&lt;211&gt; 1367

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3231

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420
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780
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1080

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 1367

<210> 3232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3232

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Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly
			20					25					30		
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr
	35					40					45				
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val
	50					55					60				
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr
65					70					75				80	
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala
			85					90					95		
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr
		100						105					110		
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser	
	115					120					125				
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe
	130					135					140				
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu
145					150					155				160	
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly
			165					170						175	
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met
		180						185					190		
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg
	195					200					205				
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro
	210					215					220				
Ala	Ser	Met	Arg	Arg	Ala	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His
225					230					235				240	
Asn	Trp	Gly	Gln	Gly	Phe	Arg	Leu	Gly	Asp	Gln					
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<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3233

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 240  
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 300  
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 360  
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 420  
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 480  
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 720  
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 780  
 aaggatcagc acggtctggg gccaggtgg ggtggaacac gcacggtcca caagcaattc  
 840  
 tgtctttctc aaggcttttt cttgtgcagt atgaaatcct tcatatttca tatgaagtat  
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 gtgccttctg gggcactgag ctccaggaact ccaaaaagac cccttcgggc cggatccccg  
 960  
 cttcaaggct gcccc  
 975

&lt;210&gt; 3234

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3234

Xaa	Ala	Tyr	Val	Val	Glu	Leu	Cys	Val	Phe	Thr	Ile	Phe	Gly	Asn	Glu
1				5					10					15	
Glu	Asn	Gly	Lys	Thr	Val	Val	Tyr	Leu	Val	Ala	Phe	His	Leu	Phe	Phe
			20					25					30		
Val	Met	Phe	Val	Trp	Ser	Tyr	Trp	Met	Thr	Ile	Phe	Thr	Ser	Pro	Ala
			35				40					45			
Ser	Pro	Ser	Lys	Glu	Phe	Tyr	Leu	Ser	Asn	Ser	Glu	Lys	Glu	Arg	Tyr
			50			55					60				
Glu	Lys	Glu	Phe	Ser	Gln	Glu	Arg	Gln	Gln	Glu	Ile	Leu	Arg	Arg	Ala
65					70					75				80	
Ala	Arg	Ala	Leu	Pro	Ile	Tyr	Thr	Thr	Ser	Ala	Ser	Lys	Thr	Ile	Arg

2439

	85		90		95										
Lys	Glu	Lys	Asn	Glu	Ile	Ile	Ala	Arg	Leu	Glu	Glu	Lys	Thr	Asn	Lys
			100					105					110		
Ile	Thr	Ala	Ala	Met	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Gln	Ala	Glu
		115					120					125			
Lys	Ala	Gln	Met	Glu	Ala	Glu	Asp	Glu	Asp	Glu	Lys	Tyr	Leu	Gln	Glu
	130					135					140				
Cys	Leu	Ser	Lys	Ser	Asp	Ser	Leu	Gln	Lys	Gln	Ile	Ser	Gln	Lys	Glu
145				150					155					160	
Lys	Gln	Leu	Val	Gln	Leu	Glu	Thr	Asp	Leu	Lys	Ile	Glu	Lys	Glu	Trp
			165				170						175		
Arg	Gln	Thr	Leu	Gln	Glu	Asp									
			180												

&lt;210&gt; 3237

&lt;211&gt; 1323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3237

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cgggcgctgt ggacctggc tccgcccgcg gcgcctggcc gggaccgtgt gggccgtgag  
120  
gatgaggacc gttggaagt acggggggac cgcaaggccc ggaagcccct ggtggagaag  
180  
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240  
gaggtgcagg ccaagctgga gaacccgaa gtgctggagc tgacggtgcg gcgggtccag  
300  
ggtgtgctgc ggggcccggc gcgcgagcgc gagcagctgc aggcggaagc gagcgagcgc  
360  
ttcgtgccc gctacatcca gtgcatgcac gaggtgcaca cgttcgtgct cactgtccag  
420  
gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgctg  
480  
cgtgagggca gcagcttcca ggatctgctg ggggacgccc tggcggggcc acctagagcc  
540  
cctggacgga gtggctggcc tgcggggggc gctccgggat cccaataacc cagccccccg  
600  
ggtcctgggg acgacctgtg ctccgacctg gaggaggccc ctgaggctga actgagtcag  
660  
gctcctgctg aggggcccga cttggtgccc gcagccctgg gcagcctgac cacagcccaa  
720  
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780  
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840  
cctggaagtc tcccaggtct tccctccctc ctctgatgga tggttgagc ggcagccct  
900  
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960  
ctctggagtg ggtggaggga gggagctacg ggcaggagga agaattttgt agagctgcc  
1020

gcgctctccc aggttcacccc acccaggctt caccagccct gtgcgggctc tgggggcaga  
 1080  
 ggtggcagaa atggtgctgg gcactagtgt tccaggcagc cctgggctaa acaaaagctt  
 1140  
 gaacttgcca cttcagcggg gagatgagag gcagggtgcac tcagctgcac tgcccagagc  
 1200  
 tgtgatgctc tgtacatctt gttttagca cacttgagtt tgtgtattcc attgacatca  
 1260  
 aatgtgacaa ttttactaaa taaagaattt tggagttagt tacccttgaa aaaaaagtcg  
 1320  
 acg  
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

Xaa	Leu	Gly	Cys	Asp	Leu	Pro	Arg	Arg	Gly	Val	Cys	Thr	Lys	Ala	Leu
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Gly	Ala	Gly	Leu	Arg	Ala	Leu	Trp	Thr	Met	Ala	Pro	Pro	Ala	Ala	Pro
			20					25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
		35					40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55				60					
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
	65				70					75				80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
				85					90					95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
			100					105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
		115					120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130						135					140			
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
	145				150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
				165					170					175	
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
			180					185					190		
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
		195				200						205			
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
	225				230					235					240
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
				245											

<210> 3239

<211> 432

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3239

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agaaacttgg tgagaaataa gctggcagtg attacgcgtc tccttcagaa tctgatcatg
120
ggtttgttcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa gggtgctatc
180
caggaccgcg taggtctcct ttaccagttt gtgggcgcca ccccgtaacac aggcattgctg
240
aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
300
ctctaccaga agtggcagat gatgctggcc tatgcaactgc acgtcctccc cttcagcggt
360
gttgccacca tgattttcag cagtgtgtgc tactggacgc tgggcttaca tcctgaggtt
420
gcccgattgg gt
432

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&lt;210&gt; 3240

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3240

```

Lys Thr Lys Asp Ser Pro Gly Val Phe Ser Lys Leu Gly Val Leu Leu
1           5           10           15
Arg Arg Val Thr Arg Asn Leu Val Arg Asn Lys Leu Ala Val Ile Thr
20           25           30
Arg Leu Leu Gln Asn Leu Ile Met Gly Leu Phe Leu Leu Phe Phe Val
35           40           45
Leu Arg Val Arg Ser Asn Val Leu Lys Gly Ala Ile Gln Asp Arg Val
50           55           60
Gly Leu Leu Tyr Gln Phe Val Gly Ala Thr Pro Tyr Thr Gly Met Leu
65           70           75           80
Asn Ala Val Asn Leu Phe Pro Val Leu Arg Ala Val Ser Asp Gln Glu
85           90           95
Ser Gln Asp Gly Leu Tyr Gln Lys Trp Gln Met Met Leu Ala Tyr Ala
100          105          110
Leu His Val Leu Pro Phe Ser Val Val Ala Thr Met Ile Phe Ser Ser
115          120          125
Val Cys Tyr Trp Thr Leu Gly Leu His Pro Glu Val Ala Arg Leu Gly
130          135          140

```

&lt;210&gt; 3241

&lt;211&gt; 492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3241

```

gtggaatttt tttagacaaa gtctcaaaaa acaacaaaac aaacaaaagg taagataaat
60

```



acgaaataca aaataagagg caggaagagc ccaaagcatc agaaatgtgc cagttataat  
 120  
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc  
 180  
 acagacatgc tcccaggaca ctgcacagca aggaggtacg gcgggcccag ccagccaagg  
 240  
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg  
 300  
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggctccctc agccccacac  
 360  
 cccacccagg caggagcggg gcctggcccc gggcaggcgg gtgggagagc tcaactgagt  
 420  
 ggcagcaggg catggccctt gatgctgcag gtaccaggc tgcagctgca gaaacctcag  
 480  
 tgggaaccca gg  
 492

&lt;210&gt; 3242

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3242

Met	Gly	Gln	Asn	Pro	Leu	Leu	Cys	Leu	Gln	Lys	Tyr	Leu	Lys	Asn	Thr
1				5					10					15	
Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
			20					25					30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35					40					45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
	50					55					60				
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
65					70					75				80	
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
			85					90						95	
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
			100					105							

&lt;210&gt; 3243

&lt;211&gt; 944

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3243

gatctgcatt ttcaagttag caaagaccgc tatggagggc agccactttt ctacagagaag  
 60  
 ttccccaccc tttggtctgg ggcaaggagt acttacggag tgacaaaggg aaaagtctgc  
 120  
 tttgaggcaa aggtaaccca gaatctccca atgaaagaag gctgcacaga ggtctctctc  
 180  
 cttcgagttg ggtggtctgt tgatttttcc cgtccacagc ttggtgaaga tgaattctct  
 240  
 tacggtttcg atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag  
 300

acttttgggg agaatgatgt tattggctgc ttgctaatt ttgagactga agaagtagaa  
 360  
 ctttccttct ccaagaatgg agaagacctt ggtgtggcat tctggatcag caaggattcc  
 420  
 ctggcagacc gggcccttct accccatgtc ctctgcaaaa attgtgttgt agaattaaac  
 480  
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 540  
 gtgcctgttg aggagcgtgt acgcactgca gtccctccca agaccataga ggaatgtgag  
 600  
 gtgattctga tgggtgggact acccggatct ggaaagaccc agtgggcact gaaatatgca  
 660  
 aaagaaaacc ctgagaaaag atacaatgtc ctgggagctg agactgtgct caatcaaag  
 720  
 aggatgaagg gtctcgagga gccagagatg gaccccaaaa gccgagacct tttagttcag  
 780  
 caagcctccc agtgccttag taagctggtc cagattgctt cccggacaaa gaggaacttt  
 840  
 attcttgatc agtgtaatgt gtacaattct ggccaacggc ggaagctatt gctgttcaag  
 900  
 accttctctc ggaaagtggg ggtggttgtc cctaagagg aaga  
 944

<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

Asp	Leu	His	Phe	Gln	Val	Ser	Lys	Asp	Arg	Tyr	Gly	Gly	Gln	Pro	Leu
1			5					10					15		
Phe	Ser	Glu	Lys	Phe	Pro	Thr	Leu	Trp	Ser	Gly	Ala	Arg	Ser	Thr	Tyr
		20					25					30			
Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
		35				40						45			
Leu	Pro	Met	Lys	Glu	Gly	Cys	Thr	Glu	Val	Ser	Leu	Leu	Arg	Val	Gly
		50				55					60				
Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
65				70					75					80	
Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
			85						90					95	
Glu	Phe	Gly	Gln	Thr	Phe	Gly	Glu	Asn	Asp	Val	Ile	Gly	Cys	Phe	Ala
			100					105					110		
Asn	Phe	Glu	Thr	Glu	Glu	Val	Glu	Leu	Ser	Phe	Ser	Lys	Asn	Gly	Glu
		115				120						125			
Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
		130				135						140			
Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
145				150						155				160	
Phe	Gly	Gln	Lys	Glu	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val
			165						170					175	
Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
			180						185					190	
Pro	Lys	Thr	Ile	Glu	Glu	Cys	Glu	Val	Ile	Leu	Met	Val	Gly	Leu	Pro

195	200	205
Gly Ser Gly Lys Thr Gln Trp	Ala Leu Lys Tyr	Ala Lys Glu Asn Pro
210	215	220
Glu Lys Arg Tyr Asn Val Leu	Gly Ala Glu Thr Val Leu	Asn Gln Met
225	230	235
Arg Met Lys Gly Leu Glu Glu	Pro Glu Met Asp	Pro Lys Ser Arg Asp
245	250	255
Leu Leu Val Gln Gln Ala Ser	Gln Cys Leu Ser Lys Leu	Val Gln Ile
260	265	270
Ala Ser Arg Thr Lys Arg Asn	Phe Ile Leu Asp Gln Cys	Asn Val Tyr
275	280	285
Asn Ser Gly Gln Arg Arg Lys	Leu Leu Leu Phe Lys Thr	Phe Ser Arg
290	295	300
Lys Val Val Val Val Val	Pro Asn Glu Glu	
305	310	

&lt;210&gt; 3245

&lt;211&gt; 980

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3245

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 ctgagctgga tgaggatggg gatttggacg tggtgagaag accacgagcc gcctctgatt  
 120  
 ccaaccacgc agggcctctg agagacaagg tacatcccat gattctagca caggaagaag  
 180  
 acgacgtcct gggagaggaa gcacaaggca gccgcacga tatcatcaga ataggtgtgg  
 240  
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 300  
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 720  
 acatgtgaag cctacgatca cttccgctcc tgctgcacg cgctggagca gctcacagat  
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 840  
 gagcgctcc agcagctgga gctctggaag atcatcgag aaccagtaac atgacccatc  
 900  
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 960

ctcaccaaag caaaaaaaaaa  
980

<210> 3246  
<211> 219  
<212> PRT  
<213> Homo sapiens

<400> 3246  
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Asp Leu Phe Arg Gly Cys Thr Ala Leu Glu Leu Gly Ala Gly Thr Gly  
20 25 30  
Leu Ala Ser Ile Ile Ala Ala Thr Met Ala Arg Thr Val Tyr Cys Thr  
35 40 45  
Asp Val Gly Ala Asp Leu Leu Ser Met Cys Gln Arg Asn Ile Ala Leu  
50 55 60  
Asn Ser His Leu Ala Ala Thr Gly Gly Gly Ile Val Arg Val Lys Glu  
65 70 75 80  
Leu Asp Trp Leu Lys Asp Asp Leu Cys Thr Asp Pro Lys Val Pro Phe  
85 90 95  
Ser Trp Ser Gln Glu Glu Ile Ser Asp Leu Tyr Asp His Thr Thr Ile  
100 105 110  
Leu Phe Ala Ala Glu Val Phe Tyr Asp Asp Asp Leu Thr Asp Ala Val  
115 120 125  
Phe Lys Thr Leu Ser Arg Leu Ala His Arg Leu Lys Asn Ala Cys Thr  
130 135 140  
Ala Ile Leu Ser Val Glu Lys Arg Leu Asn Phe Thr Leu Arg His Leu  
145 150 155 160  
Asp Val Thr Cys Glu Ala Tyr Asp His Phe Arg Ser Cys Leu His Ala  
165 170 175  
Leu Glu Gln Leu Thr Asp Gly Lys Leu Arg Phe Val Val Glu Pro Val  
180 185 190  
Glu Ala Ser Phe Pro Gln Leu Leu Val Tyr Glu Arg Leu Gln Gln Leu  
195 200 205  
Glu Leu Trp Lys Ile Ile Ala Glu Pro Val Thr  
210 215

<210> 3247  
<211> 977  
<212> DNA  
<213> Homo sapiens

<400> 3247  
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cgcaacatcg tggccaaccg cctggcctcg gatggggcca cctgggcaga catcttcaag  
120  
aggttcaaca gcggcacgta taacaaccag tggatgatcg tggactacaa ggcgttcac  
180  
ccgggtgggc ccagccccgg gagccgggtg cttaccatcc tggagcagat ccccgcatg  
240  
gtggtggtgg ctgacaagac ctgggagctc taccagaaga cctactgggc cagctacaac  
300

ataccgtcct tcgagactgt gttcaatgcc agtgggctgc aggccctagt ggcccagtat  
 360  
 ggggactggg tttcttatga cgggagcccc cgggcccaga tcttcggcg gaaccagtca  
 420  
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 600  
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 660  
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 720  
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 780  
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 840  
 acccccgctc caaggccacc ggactttctaa ctccagcccc tcttgggggc ttcgttctct  
 900  
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 960  
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 977

&lt;210&gt; 3248

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3248

Asn	Pro	Ala	Leu	Trp	Lys	Tyr	Val	Arg	Pro	Arg	Gly	Cys	Val	Leu	Glu
1				5					10					15	
Trp	Val	Arg	Asn	Ile	Val	Ala	Asn	Arg	Leu	Ala	Ser	Asp	Gly	Ala	Thr
			20					25					30		
Trp	Ala	Asp	Ile	Phe	Lys	Arg	Phe	Asn	Ser	Gly	Thr	Tyr	Asn	Asn	Gln
	35						40					45			
Trp	Met	Ile	Val	Asp	Tyr	Lys	Ala	Phe	Ile	Pro	Gly	Gly	Pro	Ser	Pro
	50					55					60				
Gly	Ser	Arg	Val	Leu	Thr	Ile	Leu	Glu	Gln	Ile	Pro	Gly	Met	Val	Val
65					70				75					80	
Val	Ala	Asp	Lys	Thr	Ser	Glu	Leu	Tyr	Gln	Lys	Thr	Tyr	Trp	Ala	Ser
			85						90					95	
Tyr	Asn	Ile	Pro	Ser	Phe	Glu	Thr	Val	Phe	Asn	Ala	Ser	Gly	Leu	Gln
			100					105					110		
Ala	Leu	Val	Ala	Gln	Tyr	Gly	Asp	Trp	Phe	Ser	Tyr	Asp	Gly	Ser	Pro
	115					120						125			
Arg	Ala	Gln	Ile	Phe	Arg	Arg	Asn	Gln	Ser	Leu	Val	Gln	Asp	Met	Asp
	130					135					140				
Ser	Met	Val	Arg	Leu	Met	Arg	Tyr	Asn	Asp	Phe	Leu	His	Asp	Pro	Leu
145					150					155				160	
Ser	Leu	Cys	Lys	Ala	Cys	Asn	Pro	Gln	Pro	Asn	Gly	Glu	Asn	Ala	Ile
			165					170					175		
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&lt;212&gt; DNA

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&lt;400&gt; 3249

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<212> PRT

<213> Homo sapiens

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&lt;210&gt; 3251

&lt;211&gt; 2595

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&lt;213&gt; Homo sapiens

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&lt;211&gt; 180

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&lt;213&gt; Homo sapiens

&lt;400&gt; 3254

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			20					25					30		
Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
			35				40					45			
Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu
			50			55				60					
Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp
65					70				75					80	
Leu	Gly	Leu	Pro	Gly	Phe	Phe	Pro	Ser	Gln	Glu	His	Glu	Ala	Thr	Arg
				85				90					95		
Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
			100				105					110			
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln
			115				120					125			
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala
			130			135					140				
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His
145				150					155					160	
Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met
			165				170						175		
Pro	Phe	Tyr	Gln												
			180												

&lt;210&gt; 3255

&lt;211&gt; 724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3255

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 gcgagaggag aggacggcga tcgtagggga cacctgagag tcagaggccc gagggggctg  
 120  
 ggactcatgt cgaggtcggg gaaggatgta aaacccggac ggacatcact gtagggcgca  
 180  
 cctgctgaga ggccagagct gcctccttga gagtgaagtt gtttacagac aagagaagag  
 240  
 atcttgggcg acacatcaca gctagccgag aatcccgaag ggtcagcaga gcctagaaag  
 300  
 gaatatgagg ggggtcggaa tgaggcaggc gaaaggcacg gacgtgggag ggcacggcta  
 360  
 cccaacgggg acacctacga agggagctac gaattcggta aaagacatgg ccaggggatc  
 420  
 taaaaattta aaaatggtgc tcgatataac ggagaatatg ttagaaataa aaagcacggg  
 480  
 caaggcactt ttatatatcc agatggatcc agatatgaag gagagtgggc aaatgacctg  
 540  
 cggcacggcc atggcgata ctactacatc aataatgaca cctacactgg agagtgggtt  
 600  
 gctcatcaaa ggcattggga aggcacatat ttatacgag agacgggcag taagtatgtt  
 660  
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 720  
 tacc  
 724

&lt;210&gt; 3256

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3256

Ser	Cys	Leu	Gln	Thr	Arg	Glu	Glu	Ile	Leu	Ala	Asp	Thr	Ser	Gln	Leu
1				5					10					15	
Ala	Ala	Asn	Pro	Glu	Gly	Ser	Ala	Glu	Pro	Arg	Lys	Glu	Tyr	Glu	Gly
		20						25				30			
Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35					40					45			
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
	50					55				60					
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65					70				75					80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85					90					95		
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
		100					105					110			
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
	115					120					125				
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130				135					140					
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
145					150				155						160
Glu	Leu	Ile	His	Leu	Asn	His	Arg	Tyr							

165

&lt;210&gt; 3257

&lt;211&gt; 368

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3257

```

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cgctcacctc accactacta cgcctctggt gatttgtcta cagcaaccaa gagcgaaaca
120
agtgaagaca tcagccagac ctccaagtac agtcccatct actcgccaga cccctactat
180
gcttcggagt ctgagtactg gacctaccat ggggtcccca aagtgccccg agccagaagg
240
ttctcgtctg gaggagagga ggatgatttt gaccgcagca tgcacaagct ccaaagtgga
300
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360
tggcgcgc
368

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&lt;210&gt; 3258

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3258

```

Xaa Pro Gly Tyr Ile Asp Ser Pro Thr Tyr Ser Arg Gln Gly Met Ser
1      5      10      15
Pro Thr Phe Ser Arg Ser Pro His His Tyr Tyr Arg Ser Gly Asp Leu
20     25     30
Ser Thr Ala Thr Lys Ser Glu Thr Ser Glu Asp Ile Ser Gln Thr Ser
35     40     45
Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser
50     55     60
Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg
65     70     75     80
Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys
85     90     95
Leu Gln Ser Gly Ile Gly Arg Leu Ile Leu Lys Glu Glu Met Lys Ala
100    105    110
Arg Ser Ser Ser Tyr Ala Asp Pro Trp Arg
115    120

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&lt;210&gt; 3259

&lt;211&gt; 747

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3259

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acgcgtgaag ggcgcaccct ctgctgcagc actggccacc cgggacacgc tgcagggccca
60

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gtgctcagcc ttcgtacagc tctgggcccgg cctgcagccc atcttgtgtg gcaacaaccg  
 120  
 caccattgaa cccggagcgc tgcggcgggg caacatgagc tccctgggct ttacgagcaa  
 180  
 ggagcagcgg aacctgggccc ttctcgtgca cctcatgacc agcaacccca aaatcctgta  
 240  
 cgcgcctgcg ggctctgagg tcgaccgcgt catcctcaag gccaacgaga cttttgcttt  
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 660  
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 720  
 cactacaaga tccgccagaa ctccagc  
 747

&lt;210&gt; 3260

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3260

Met	Ser	Ser	Leu	Gly	Phe	Thr	Ser	Lys	Glu	Gln	Arg	Asn	Leu	Gly	Leu
1				5					10					15	
Leu	Val	His	Leu	Met	Thr	Ser	Asn	Pro	Lys	Ile	Leu	Tyr	Ala	Pro	Ala
			20					25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
		35					40					45			
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
	50					55					60				
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65					70				75					80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90					95		
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
		100						105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
		115				120						125			
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
		130				135					140				
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145					150					155				160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
			165					170						175	
Phe	Gln	Thr	Arg	Lys	Asp	Gly	Ser	Ser	Arg	Leu	Thr	Cys	Thr	Thr	Arg

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185

190

<210> 3261  
<211> 1323  
<212> DNA  
<213> Homo sapiens

<400> 3261  
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tgctgtgcca attgtgtttt ttgtctctgt gtacattttg gttttatttg gggttgctgt  
180  
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240  
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300  
gaggtgtggc tcaggaccga cctgaagggt gatgatctgg aggaggggtg cacaagtga  
360  
gagtttgata aattccttga agaaagagcc aaagctgctg aaatgggtcc cgacctcccc  
420  
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480  
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540  
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600  
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660  
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720  
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780  
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960  
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1200  
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1320

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1323

<210> 3262

<211> 81

<212> PRT

<213> Homo sapiens

<400> 3262

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Arg Thr Asp Leu Lys Gly Asp Asp Leu Glu Glu Gly Val Thr Ser Glu
      20             25             30
Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val
      35             40             45
Pro Asp Leu Pro Ser Pro Pro Met Glu Ala Pro Ala Pro Ala Ser Asn
      50             55             60
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala
65             70             75             80
Leu

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<210> 3263

<211> 1128

<212> DNA

<213> Homo sapiens

<400> 3263

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120
gagctggaga gagaggccaa gaaatcagcg aagaagccgc agtcctcaag cacagagccc
180
gccaggaaac ctggccagaa ggagaagaga gtgcggcccg aggagaagca acaagccaag
240
cccgtgaagg tggagcggac ccggaagcgg tccgagggtt tctcgatgga caggaaggta
300
gagaagaaga aagagccctc cgtggaggag aagctgcaga agctgcacag tgagatcaag
360
tttgccctaa aggtcgacag ccgggacgtg aaggggtgcc tgaatgccct agaggagctg
420
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540
acccggctca agtcgcggtt cctcggccca aagatcgagg cgggtgcagaa agtgaacaag
600
gctgggatgg agaaggagaa ggccgaggag aagctggccg gggaggagct ggccggggag
660
gaggcccccc aggagaaggc ggaggacaag ccagcaccg atctctcagc ccagtgatga
720
ggcgaggcca catcacagaa gggggagagc gcagaggaca aggagcacga ggagggtcgg
780

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900  
tcggaggccc tggacagga gagctgagcc gcgggcagcc agggccagcc cccgcccag  
960  
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1020  
cgctgtgctg tttgtatttg ttcccttggg ttttttttct ctgcctaatt tctgtgattt  
1080  
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<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

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		20					25				30			
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys
		35					40				45			
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys
	50					55				60				
Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala
65					70				75					80
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser
			85						90					95
Asp	Arg	Lys	Val	Glu	Lys	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys
		100						105				110		
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser
	115					120					125			
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu
	130					135					140			
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr
145					150					155				160
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys
			165					170					175	
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys
		180						185				190		
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys
	195					200					205			
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro
	210					215					220			
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val
225					230					235				240
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu
			245						250				255	
Glu	Glu	Gly	Arg	Asp	Ser	Glu	Glu	Gly	Pro	Arg	Cys	Gly	Ser	Ser
			260					265				270		
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro



&lt;400&gt; 3267

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120  
cattgtggga agtttcaaga tgccttgag ccattgctca gctgggtggc agataccgag  
180  
gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc  
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393

&lt;210&gt; 3268

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
1				5				10					15		
Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
		20					25					30			
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
		35				40						45			
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
	50				55					60					
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65				70					75					80	
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
			85				90						95		
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
		100					105					110			
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115					120					125			
Arg	Trp	Thr													
		130													

&lt;210&gt; 3269

&lt;211&gt; 1423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3269

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180

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 300  
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 780  
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 840  
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 1423

&lt;210&gt; 3270

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3270

Met	Ile	Glu	Asn	Glu	Met	Leu	Thr	Met	Glu	Leu	Asn	Gly	Asp	Ser	Met
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Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
			20					25					30		
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

```

      35              40              45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu
      50              55              60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu
65              70              75              80
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala
      85              90              95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys
      100             105             110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys
      115             120             125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser
      130             135             140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu
145             150             155             160
Phe Val Ile Arg Arg Arg Ser Ala Ala
      165

```

&lt;210&gt; 3271

&lt;211&gt; 464

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3271

```

tcatgagcag ggcccaattc tggcttctct gtggtcgcca tccatgtgct gggcgtcact
60
gaaggcactg gggatacagc cgagcacaag atggacagag atccctggcc cctcggagca
120
ggcagtctgt ggctctggcc cctccagttc cttgtcacca ggagataggc aatgcagctg
180
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
240
gtgggcaggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcagtcttg
300
gccttcatag tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta
360
ggctgggcgc ggcgcagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc
420
atggcactgc catccctctg aggcctgtgt atccccaggg atgt
464

```

&lt;210&gt; 3272

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3272

```

Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
  1              5              10              15
Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
      20              25              30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
      35              40              45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

```



```

      50              55              60
Ile Leu Ala Ala Thr Ile Ile Gly Ser Leu Ala Ala Gly Ala Leu Leu
65              70              75              80
Ile Ser Cys Ile Ala Tyr Leu Leu Val Thr Arg Asn Trp Arg Gly Gln
      85              90              95
Ser His Arg Leu Pro Ala Pro Arg Gly Gln Gly Ser Leu Ser Ile Leu
      100             105             110
Cys Ser Ala Val Ser Pro Val Pro Ser Val Thr Pro Ser Thr Trp Met
      115             120             125
Ala Thr Thr Glu Lys Pro Glu Leu Gly Pro Ala His
      130             135             140

```

<210> 3273  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3273
ngcgcgccag ggatggaaaa ctttattctg tatgaggaga tcggaagagg aagcaagact
60
gttggtctata aaggcgacg gaagggaaca atcaattttg tagccattct ttgtactgat
120
aagtgcagaa ggctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa cttttcatga atggtatgaa acaagcaacc acctctggct agtgggtggaa
240
ctccgcacag gtggttcctt aaaaacagtt attgctcaag atgaaaacct cccagaagat
300
gttggtgagag aatttggaat tgacctgatt agtggattac atcatcttca taaacttggc
360
attctctttg tgacatttct cctagga
387

```

<210> 3274  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3274
Xaa Ala Pro Gly Met Glu Asn Phe Ile Leu Tyr Glu Glu Ile Gly Arg
1              5              10              15
Gly Ser Lys Thr Val Val Tyr Lys Gly Arg Arg Lys Gly Thr Ile Asn
      20              25              30
Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr
      35              40              45
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr
      50              55              60
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu
65              70              75              80
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn
      85              90              95
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly
      100             105             110
Leu His His Leu His Lys Leu Gly Ile Leu Phe Val Thr Phe Leu Leu

```

115 120 125  
Gly

<210> 3275  
<211> 1266  
<212> DNA  
<213> Homo sapiens

<400> 3275  
ttttttttaa tcagttaaga ttcttggtga cacaaattgt ttacatcaa ctgttggtat  
60  
agaacacatg aaaggaatac atggggaaga aataaagtag aaccaagag ttcttttaag  
120  
ttttctttta tagagacatg aataacagat acactgaagt ataaacaaaa attggcctga  
180  
agcgtccggg ggccgggctta gttaggagct atggctaaac atcatcctga ttgatcttt  
240  
tgccgcaagc aggctgggtg tgccatcgga agactgtgtg aaaaatgtga tggcaagtgt  
300  
gtgatttggtg actcctatgt gcgtccctgc actctgggtgc gcatatgtga tgagtgtaac  
360  
tatggatctt accaggggcg ctgtgtgatc tgtggaggac ctgggggtctc tgatgcctat  
420  
tattgtaagg agtgcaccat ccaggagaag gacagagatg gctgcccaaa gattgtcaat  
480  
ctggggagct ctaagacaga cctcttctat gaacgcaaaa aatacggtt caagaagagg  
540  
tgattgggtgg gtggccctt cctccccca acatcagtct gctgcagctg ccagaaaaca  
600  
tgcctactac taccagcaga aaggagcag agccagagc atcaccagga gtgcctgcta  
660  
gtgtactggc agcttgccac cccctcctct cccttcaccc agacacgtgg tagggatgga  
720  
aaaggattct tcacagagca ctctggcaca ccatatcgga gaaaaattga tagattagtt  
780  
aatggttttt cttgaattcg agaagcatag atctgttctc catattggta tgttctccct  
840  
caaccaagat cttctaaaaa gaaataatat tttagtcttc tgcttgagga actgactgtg  
900  
aagcgacgcc cagtgaaaaa catgatcttg cagcagctct ggtggcagct gtccttgagg  
960  
aacctttggt gtgtggtggg aagctatcag aacaagaaat gtaggcattt cccgtttttt  
1020  
ttgggggggg ggtggggggg cagggctctg ccctcttgaa aggcatttac ttgtttaaca  
1080  
cttgccagc tacagtgggg tacagtagct ggctattcac aggcattcac atagcccact  
1140  
agtctcatat ttttttcctt ttgagaaatt ggaaactctt tctgttgcta ttatattaat  
1200  
aaagtgggtg tttattttct ggtaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
1260  
aaaaaa  
1266

<210> 3276  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 3276  
 Met Ala Lys His His Pro Asp Leu Ile Phe Cys Arg Lys Gln Ala Gly  
 1 5 10 15  
 Val Ala Ile Gly Arg Leu Cys Glu Lys Cys Asp Gly Lys Cys Val Ile  
 20 25 30  
 Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu  
 35 40 45  
 Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro  
 50 55 60  
 Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys  
 65 70 75 80  
 Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser Ser Lys Thr  
 85 90 95  
 Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg  
 100 105 110

<210> 3277  
 <211> 1435  
 <212> DNA  
 <213> Homo sapiens

<400> 3277  
 ncctccgtct ccgagaacaa caacaacagc aacaagaaaa caacaataaa aaaaataagg  
 60  
 ctgctgtgga ggcagaaaga gctaattgagg ccacgcttgt ccctcggcca cgtccccacc  
 120  
 cagacttccg tctccttaaa atgttcattgc gtaagtgcgt ggcagaagcg gctcaagcgc  
 180  
 actcgtgcgt cattgctgtc agggccgagg gagcgggtgca aggccgccgc gtgacgtcag  
 240  
 gacgccgcgg tcaggacgtc gaagccaaag aagaccagag ccagccgggt ggcacagcgg  
 300  
 tgtcgtggcc gtgttgctga tcgctgggt ggttgttggc gtgtccctgc agcgaaggat  
 360  
 cctgggttggc agtgaaaaag cagtctggct cccgaggtcc accccttata cccaaggtc  
 420  
 cagatggcgg ccaacgtggg tgatcaacgt agcacagatt ggtcttctca gtacagcatg  
 480  
 gtggctgggg caggccgaga gaatggcatg gagacgccga tgcacgagaa cccggagtgg  
 540  
 gagaaggccc gtcaggccct ggccagcatc agcaagtcag gagctgccgg cggtcttgcc  
 600  
 aagtccagca gcaatgggccc tgtggccagt gcaagtacgt gtcccaggca gaagcctcag  
 660  
 ctttgcagca gcagcagtac taccagtggg accagcagta caactatgcc tacccttaca  
 720  
 gctactacta tcccatgagc atgtaccaga gctatggctc cccttcccag tatgggatgg  
 780

ccggctccta tggctagcca caccacagca gccatccgca ccccaacacc aagggactct  
 840  
 gaaccagccc ccagtccccg gcatggatga gagcatgtcc taccaggctc cccctcagca  
 900  
 gctgccgtcg gctcagcccc ctcagccctc aaatccccca catggggctc acacgtgaa  
 960  
 cagtggccct cagcctggga cagctccagc cacacagcan ncagccaggc ggggcccgcc  
 1020  
 acgggccagg cctatggggc acacacctac accgaacctg ccaagcccaa gaaggccaa  
 1080  
 cagctgtgga accgcatgaa acccgccctt gggactggag gttcaagttc aacatccaga  
 1140  
 agcgaccctt tgctgttacc acccagagct ttggctccaa cgagagggc cagcacagt  
 1200  
 gttttggccc ccagcccaac cctgagaaag ttcagaacca cagcgggtcc tctgcccggg  
 1260  
 ggaacctgtc tgggaagccc gatgactggc ccagggacat gaaagagtat gtggagcgt  
 1320  
 gcttcaccgc ctgtgagtcg gaggaggaca aggaccgcac ggaaaagctg ctcaaggagg  
 1380  
 tgctgcaggc gcggtcgcag gacggctcgg cctataccat tgactggagc cgga  
 1435

&lt;210&gt; 3278

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3278

Met	Ala	Ala	Asn	Val	Gly	Asp	Gln	Arg	Ser	Thr	Asp	Trp	Ser	Ser	Gln
1				5				10					15		
Tyr	Ser	Met	Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr	Pro
		20					25					30			
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
		35				40					45				
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
	50				55					60					
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65				70				75					80		
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
			85					90					95		
Thr	Pro	Thr	Ala	Thr	Thr	Ile	Pro								
				100											

&lt;210&gt; 3279

&lt;211&gt; 1130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3279

nngcgcgccc accgcgcgc atccatgttc gacaccacac ccactcttgg ccggagcacg  
 60  
 ccaagcagct ccccatcgct ccggaaacgg ctgcagctcc tgcccccaag ccggccccca  
 120

cctgagccag aaccaggcac catggtggag aagggatcag atagctcttc agagaagggg  
 180  
 ggggtgcctg ggacccccag caccagagc ctaggcagcc ggaacttcat ccgcaacagc  
 240  
 aagaagatgc agagctggta cagtatgctg agccccactt ataagcagcg taatgaggac  
 300  
 ttccggaaac tggtcagcaa actccccgaa gcagaacgcc tcattgtgga ttactcctgc  
 360  
 gccctgcagc gtgagatcct gctccagggc cgctctacc tctctgagaa ctggatctgc  
 420  
 ttctacagca acatcttccg ctgggagacc acgatctcca tccagctgaa ggaagtgaca  
 480  
 tgtctgaaga aggaaaagac ggccaagctg atccccaacg ccatccagat ctgcacggag  
 540  
 agcgagaagc atttcttcac ttcctttggg gccctgacc gctgcttctt cctcatcttc  
 600  
 cgcctctggc agaatgcact gcttgaaaag acgctgagtc cccgcgagct ctggcacctg  
 660  
 gtgcatcagt gctacggctc agagctgggc ctcaccagtg aggatgagga ctatgtctcc  
 720  
 cccttcagc tgaacggtct ggggaccccc aaggaagtgg gagatgtgat cgccctgagc  
 780  
 gacatcacct cctcgggggc agctgaccgc agccaggagc caagcccagt gggttcgcgc  
 840  
 cgtggccatg tcacgcccac cctttcccga gccagcagcg acgcagacca tggggcagag  
 900  
 gaggacaagg aggagcaggt agacagccag ccagacgcct cctccagcca gacagtgacc  
 960  
 ccggtggctg aacccccgag cacagagccc acccagcctg acgggcccac caccctgggc  
 1020  
 cccttgatc tgctgcccag tgaggagcta ttgacagaca caagtaactc ctcttcatcc  
 1080  
 actggggagg aagcggactt ggctgccctg cttcccgacc tctccggccg  
 1130

&lt;210&gt; 3280

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3280

Xaa	Arg	Ala	His	Arg	Ala	Ala	Ser	Met	Phe	Asp	Thr	Thr	Pro	His	Ser
1				5					10					15	
Gly	Arg	Ser	Thr	Pro	Ser	Ser	Ser	Pro	Ser	Leu	Arg	Lys	Arg	Leu	Gln
			20					25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met
		35					40					45			
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
	50					55					60				
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65					70				75					80	
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
			85						90					95	
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

	100		105		110										
Arg	Leu	Ile	Val	Asp	Tyr	Ser	Cys	Ala	Leu	Gln	Arg	Glu	Ile	Leu	Leu
	115						120					125			
Gln	Gly	Arg	Leu	Tyr	Leu	Ser	Glu	Asn	Trp	Ile	Cys	Phe	Tyr	Ser	Asn
	130						135				140				
Ile	Phe	Arg	Trp	Glu	Thr	Thr	Ile	Ser	Ile	Gln	Leu	Lys	Glu	Val	Thr
145				150						155					160
Cys	Leu	Lys	Lys	Glu	Lys	Thr	Ala	Lys	Leu	Ile	Pro	Asn	Ala	Ile	Gln
			165						170					175	
Ile	Cys	Thr	Glu	Ser	Glu	Lys	His	Phe	Phe	Thr	Ser	Phe	Gly	Ala	Arg
			180					185					190		
Asp	Arg	Cys	Phe	Leu	Leu	Ile	Phe	Arg	Leu	Trp	Gln	Asn	Ala	Leu	Leu
	195						200					205			
Glu	Lys	Thr	Leu	Ser	Pro	Arg	Glu	Leu	Trp	His	Leu	Val	His	Gln	Cys
	210					215					220				
Tyr	Gly	Ser	Glu	Leu	Gly	Leu	Thr	Ser	Glu	Asp	Glu	Asp	Tyr	Val	Ser
225				230					235						240
Pro	Leu	Gln	Leu	Asn	Gly	Leu	Gly	Thr	Pro	Lys	Glu	Val	Gly	Asp	Val
			245						250					255	
Ile	Ala	Leu	Ser	Asp	Ile	Thr	Ser	Ser	Gly	Ala	Ala	Asp	Arg	Ser	Gln
	260						265						270		
Glu	Pro	Ser	Pro	Val	Gly	Ser	Arg	Arg	Gly	His	Val	Thr	Pro	Asn	Leu
	275						280					285			
Ser	Arg	Ala	Ser	Ser	Asp	Ala	Asp	His	Gly	Ala	Glu	Glu	Asp	Lys	Glu
	290					295					300				
Glu	Gln	Val	Asp	Ser	Gln	Pro	Asp	Ala	Ser	Ser	Ser	Gln	Thr	Val	Thr
305				310					315						320
Pro	Val	Ala	Glu	Pro	Pro	Ser	Thr	Glu	Pro	Thr	Gln	Pro	Asp	Gly	Pro
			325						330					335	
Thr	Thr	Leu	Gly	Pro	Leu	Asp	Leu	Leu	Pro	Ser	Glu	Glu	Leu	Leu	Thr
	340						345						350		
Asp	Thr	Ser	Asn	Ser	Ser	Ser	Ser	Thr	Gly	Glu	Glu	Ala	Asp	Leu	Ala
	355					360						365			
Ala	Leu	Leu	Pro	Asp	Leu	Ser	Gly								
	370					375									

&lt;210&gt; 3281

&lt;211&gt; 842

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3281

gaattctgcc ttgccgtgtg cctcattggc caaaggaaag caacagagtc tgcagccagg  
60gcaggaccgc caggaggggc ctggaccgcg ggggctcctg gcagcgctgt gcctttctga  
120ggcaaggagg tagagccagc ggctgaggac ctgtcagggc cagtcccagc tctgcagctt  
180gctgtgtgac ctggcacaca tcctctccct gcctccctca gtctcttccc ctgcaagacg  
240gggtcctgac acggatctca tgggattgct ctgaggccca ggagtcacca ggctcaacca  
300ctgggttcaca aagtgtgttg tttccaggaa gaacagatgg gggcgctga gggcaaaggg  
360

cctgagtgtg ggtcgaggat atgccggctg ctgctcagg ggctggggtt tcatcttgtg  
 420  
 tgtcttgaca ggggtgtgaca cttggcacca cactgttccc tgtcccttca tggatgtggc  
 480  
 ccacatgatg ttcctttcct cttgcaaaag aagttgctgg aaggccact gtccagcagc  
 540  
 ccccagggtg cctggggccac ggtgcctttg tgggcccagc tacaaggagg acttgcaggc  
 600  
 tcgtgtctgg gacagatact ggcgccaggg ccaagtgaag cccgggattg gtgggcatct  
 660  
 ctagtgtgtc cctgagagag ggtggagggt gctgacaggc cttggcgctt tcatctgtca  
 720  
 actccagagg cccttgtgct tgcagcaggg aggtcaaggc cagggcgctt gaccccgcc  
 780  
 gctcctccac actgagcctc ctgcacgtgc tcacaggtag agaagcggcg ggtcaatctg  
 840  
 tc  
 842

&lt;210&gt; 3282

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3282

Met	Pro	Thr	Asn	Pro	Gly	Leu	His	Leu	Ala	Leu	Ala	Pro	Val	Ser	Val
1				5				10					15		
Pro	Asp	Thr	Ser	Leu	Gln	Val	Leu	Leu	Val	Ala	Gly	Pro	Thr	Lys	Ala
			20				25						30		
Pro	Trp	Pro	Arg	Gln	Pro	Gly	Gly	Cys	Trp	Thr	Val	Gly	Leu	Pro	Ala
		35				40					45				
Thr	Ser	Phe	Ala	Arg	Gly	Lys	Glu	His	His	Val	Gly	His	Ile	His	Glu
	50				55					60					
Gly	Thr	Gly	Asn	Ser	Val	Val	Pro	Ser	Val	Thr	Pro	Cys	Gln	Asp	Thr
65				70				75						80	
Gln	Asp	Glu	Asn	Pro	Ala	Pro	Glu	Arg	Ala	Ala	Gly	Ile	Ser	Ser	Thr
			85				90					95			
His	Thr	Gln	Ala	Leu	Cys	Pro	Gln	Ala	Pro	Pro	Ser	Val	Leu	Pro	Gly
		100					105					110			
Asn	Asn	Thr	Leu	Cys	Glu	Pro	Val	Val	Glu	Pro	Gly	Thr	Ala	Trp	Ala
		115				120					125				
Ser	Glu	Gln	Ser	His	Glu	Ile	Arg	Val	Arg	Thr	Pro	Ser	Cys	Arg	Gly
	130					135					140				
Arg	Asp														
145															

&lt;210&gt; 3283

&lt;211&gt; 3268

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3283

nggatcagag cggtgtggt gctccagaaa cattaccgca tgcagagggc ccgccaggcc  
 60

taccagaggg tccgcagagc tgccgttggt atccaggcct tcacccggng ccatgtttgt  
120  
gcggaagaacc taccgccagt cctcatggag cacaaggcca ccaccatcca gaagcacgtg  
180  
cggggctgga tggcacgcag gcacttcag cggtgcggg atgcagccat tgtcatccag  
240  
tgtgccttcc ggatgctcaa ggccaggcgg gagctgaagg ccctcaggat tgaggcccgc  
300  
tcagcagagc atctgaaacg tctcaacgtg ggcatggaga acaagggtgg ccagctgcag  
360  
cggaagatcg atgagcagaa caaagagttc aagacacttt cagagcagtt gtccgtgacc  
420  
acctcaacat acaccatgga ggtagagcgg ctgaagaagg agctggtgca ctaccagcag  
480  
agcccagggtg aggacaccag cctcaggctg caggaggagg tggagagcct gcgcacagag  
540  
ctgcagaggg ccactcggga gcgcaagatc ttggaggacg cccacagcag ggagaaagat  
600  
gagctgagga agcagagttgc agacctggag caagaaaatg ctctcttgaa agatgagaaa  
660  
gaacagctca acaaccaa at cctgtgccag tctaaagatg aatttgcca gaactctgtg  
720  
aaggaaaatc tcctcatgaa gaaagaactg gaggaggagc gatcccggta ccagaacctt  
780  
gtgaaggaat attcacagtt ggagcagaga tacgacaacc ttcgggatga aatgaccatc  
840  
ataaagcaaa ctccagggtca taggcggaac ccatcaaacc aaagtagctt agaattctgac  
900  
tccaattacc cctccatctc cacatctgag atcggagaca ctgaggatgc cctccagcag  
960  
gtggagggaaa ttggcctgga gaaggcagcc atggacatga cggctcttct gaagctgcag  
1020  
aagagagtac gggagctgga gcaggagagg aaaaagctgc aagtgcagct ggagaagaga  
1080  
gaacagcagg acagcaagaa agtccaggcg gaaccaccac agactgacat agatttggac  
1140  
ccgaatgcag atctggccta caatagtctg aagaggcaag agctggagtc agagaacaaa  
1200  
aagctgaaga atgacctgaa tgagctgagg aaagccgtgg ccgaccaagc cagcagaat  
1260  
aactccagcc acggctcccc agatagctac agcctcctgc tgaaccagct caagctggcc  
1320  
cacgaggagc tcgaggtgcg caaggaggag gtgctcatcc tcaggacca gatcgtgagc  
1380  
gccgaccagc ggcgactcgc cggcaggaac gcggagccga acattaatgc cagatcaagt  
1440  
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1680



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<210> 3284  
 <211> 1012  
 <212> PRT  
 <213> Homo sapiens

<400> 3284  
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 Ala Phe Thr Arg Xaa His Val Cys Ala Glu Asn Leu Pro Pro Val Leu  
 35 40 45  
 Met Glu His Lys Ala Thr Thr Ile Gln Lys His Val Arg Gly Trp Met  
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 Ala Arg Arg His Phe Gln Arg Leu Arg Asp Ala Ala Ile Val Ile Gln  
 65 70 75 80  
 Cys Ala Phe Arg Met Leu Lys Ala Arg Arg Glu Leu Lys Ala Leu Arg  
 85 90 95  
 Ile Glu Ala Arg Ser Ala Glu His Leu Lys Arg Leu Asn Val Gly Met  
 100 105 110  
 Glu Asn Lys Val Val Gln Leu Gln Arg Lys Ile Asp Glu Gln Asn Lys  
 115 120 125  
 Glu Phe Lys Thr Leu Ser Glu Gln Leu Ser Val Thr Thr Ser Thr Tyr  
 130 135 140  
 Thr Met Glu Val Glu Arg Leu Lys Lys Glu Leu Val His Tyr Gln Gln  
 145 150 155 160  
 Ser Pro Gly Glu Asp Thr Ser Leu Arg Leu Gln Glu Glu Val Glu Ser  
 165 170 175  
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 180 185 190  
 Asp Ala His Ser Arg Glu Lys Asp Glu Leu Arg Lys Arg Val Ala Asp  
 195 200 205  
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 Asn Gln Ile Leu Cys Gln Ser Lys Asp Glu Phe Ala Gln Asn Ser Val  
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 Lys Glu Asn Leu Leu Met Lys Lys Glu Leu Glu Glu Arg Ser Arg  
 245 250 255  
 Tyr Gln Asn Leu Val Lys Glu Tyr Ser Gln Leu Glu Gln Arg Tyr Asp  
 260 265 270  
 Asn Leu Arg Asp Glu Met Thr Ile Ile Lys Gln Thr Pro Gly His Arg  
 275 280 285  
 Arg Asn Pro Ser Asn Gln Ser Ser Leu Glu Ser Asp Ser Asn Tyr Pro  
 290 295 300  
 Ser Ile Ser Thr Ser Glu Ile Gly Asp Thr Glu Asp Ala Leu Gln Gln  
 305 310 315 320  
 Val Glu Glu Ile Gly Leu Glu Lys Ala Ala Met Asp Met Thr Val Phe  
 325 330 335  
 Leu Lys Leu Gln Lys Arg Val Arg Glu Leu Glu Gln Glu Arg Lys Lys  
 340 345 350  
 Leu Gln Val Gln Leu Glu Lys Arg Glu Gln Gln Asp Ser Lys Lys Val  
 355 360 365  
 Gln Ala Glu Pro Pro Gln Thr Asp Ile Asp Leu Asp Pro Asn Ala Asp

370	375	380
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385	390	395
Lys Leu Lys Asn Asp	Leu Asn Glu Leu Arg	Lys Ala Val Ala Asp Gln
405	410	415
Ala Thr Gln Asn Asn Ser Ser His	Gly Ser Pro Asp Ser Tyr Ser Leu	
420	425	430
Leu Leu Asn Gln Leu Lys Leu Ala His	Glu Glu Leu Glu Val Arg Lys	
435	440	445
Glu Glu Val Leu Ile Leu Arg Thr Gln Ile Val	Ser Ala Asp Gln Arg	
450	455	460
Arg Leu Ala Gly Arg Asn Ala Glu Pro Asn Ile Asn Ala Arg Ser Ser		
465	470	475
Trp Pro Asn Ser Glu Arg His Val Asp Gln Glu Asp Ala Ile Glu Ala		
485	490	495
Tyr His Gly Val Cys Gln Thr Asn Arg Leu Leu Glu Ala Gln Leu Gln		
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Ala Gln Ser Leu Glu His Glu Glu Glu Val Glu His Leu Lys Ala Gln		
515	520	525
Leu Glu Ala Leu Lys Glu Glu Met Asp Lys Gln Gln Gln Thr Phe Cys		
530	535	540
Gln Thr Leu Leu Leu Ser Pro Glu Ala Gln Val Glu Phe Gly Val Gln		
545	550	555
Gln Glu Ile Ser Arg Leu Thr Asn Glu Asn Leu Asp Leu Lys Glu Leu		
565	570	575
Val Glu Lys Leu Glu Lys Asn Glu Arg Lys Leu Lys Lys Gln Leu Lys		
580	585	590
Ile Tyr Met Lys Lys Ala Gln Asp Leu Glu Ala Ala Gln Ala Leu Ala		
595	600	605
Gln Ser Glu Arg Lys Arg His Glu Leu Asn Arg Gln Val Thr Val Gln		
610	615	620
Arg Lys Glu Lys Asp Phe Gln Gly Met Leu Glu Tyr His Lys Glu Asp		
625	630	635
Glu Ala Leu Leu Ile Arg Asn Leu Val Thr Asp Leu Lys Pro Gln Met		
645	650	655
Leu Ser Gly Thr Val Pro Cys Leu Pro Ala Tyr Ile Leu Tyr Met Cys		
660	665	670
Ile Arg His Ala Asp Tyr Thr Asn Asp Asp Leu Lys Val His Ser Leu		
675	680	685
Leu Thr Ser Thr Ile Asn Gly Ile Lys Lys Val Leu Lys Lys His Asn		
690	695	700
Asp Asp Phe Glu Met Thr Ser Phe Trp Leu Ser Asn Thr Cys Arg Leu		
705	710	715
Leu His Cys Leu Lys Gln Tyr Ser Gly Asp Glu Gly Phe Met Thr Gln		
725	730	735
Asn Thr Ala Lys Gln Asn Glu His Cys Leu Lys Asn Phe Asp Leu Thr		
740	745	750
Glu Tyr Arg Gln Val Leu Ser Asp Leu Ser Ile Gln Ile Tyr Gln Gln		
755	760	765
Leu Ile Lys Ile Ala Glu Gly Val Leu Gln Pro Met Ile Val Ser Ala		
770	775	780
Met Leu Glu Asn Glu Ser Ile Gln Gly Leu Ser Gly Val Lys Pro Thr		
785	790	795
Gly Tyr Arg Lys Arg Ser Ser Ser Met Ala Asp Gly Asp Asn Ser Tyr		

805 810 815  
 Cys Leu Glu Ala Ile Ile Arg Gln Met Asn Ala Phe His Thr Val Met  
 820 825 830  
 Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile Leu Gln Val Phe Lys Gln  
 835 840 845  
 Leu Phe Tyr Met Ile Asn Ala Val Thr Leu Asn Asn Leu Leu Leu Arg  
 850 855 860  
 Lys Asp Val Cys Ser Trp Ser Thr Gly Met Gln Leu Arg Tyr Asn Ile  
 865 870 875 880  
 Ser Gln Leu Glu Glu Trp Leu Arg Gly Arg Asn Leu His Gln Ser Gly  
 885 890 895  
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 900 905 910  
 Leu Lys Lys Lys Thr Gln Glu Asp Ala Glu Ala Ile Cys Ser Leu Cys  
 915 920 925  
 Thr Ser Leu Ser Thr Gln Gln Ile Val Lys Ile Leu Asn Leu Tyr Thr  
 930 935 940  
 Pro Leu Asn Glu Phe Glu Glu Arg Val Thr Val Ala Phe Ile Arg Thr  
 945 950 955 960  
 Ile Gln Ala Gln Leu Gln Glu Arg Asn Asp Pro Gln Gln Leu Leu Leu  
 965 970 975  
 Asp Ala Lys His Met Phe Pro Val Leu Phe Pro Phe Asn Pro Ser Ser  
 980 985 990  
 Leu Thr Met Asp Ser Ile His Ile Pro Ala Cys Leu Asn Leu Glu Phe  
 995 1000 1005  
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 1010

&lt;210&gt; 3285

&lt;211&gt; 1518

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3285

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 aacctgatga caccaccact ttattttgag ctaaactctc atttaagtga gaacaggaca  
 120  
 ggtttcacca ctgcctcctt tggcaacttg agtgggtggtg ttcccaccga gtttatggct  
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 atcatttcat acattaacat acatgacaca tcaaaatgag aaatgcacag tttaaccgtt  
 300  
 caacagctgg ccttacttca aaagaacact atattcatat taaacattta cagtctttcc  
 360  
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tgaaccagca ctaaaggctg taggatgtga ctacatcaca gttccagaag gaaggggacc  
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 720  
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&lt;210&gt; 3286

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3286

Met	Lys	Ser	His	Pro	Gly	Gln	Lys	Thr	Val	His	Phe	Ser	Lys	Thr	Glu
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Lys	Asn	Leu	Arg	Tyr	Glu	Ala	Ala	Thr	Ser	Asp	Thr	Tyr	Arg	Lys	Gly
		20						25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
		35					40					45			
Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
	50					55					60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
65				70					75					80	
Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
			85					90					95		
Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
			100					105					110		
Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

2480

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      35      40      45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser
      50      55      60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser
65      70      75      80
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg
      85      90      95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala
      100      105      110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser
      115      120      125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly
      130      135      140
Gly Arg Gln Leu
145

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&lt;210&gt; 3289

&lt;211&gt; 554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3289

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420
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540
ataagctgca attg
554

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&lt;210&gt; 3290

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3290

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Met Ile Pro Gly Cys Leu Pro Trp Ser Phe Ala Phe Pro Ser Ser Ser
1      5      10      15
Pro Cys Lys Ala Arg Leu Leu Leu Pro Lys Gly Trp Gly Asp Val Leu
      20      25      30
Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

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<210> 3291
<211> 1075
<212> DNA
<213> Homo sapiens
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2482



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1075

<210> 3292

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3292

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Val	Ala	Ala	Leu	Gly	Trp	Arg	Pro	Pro	Arg	Val	Pro	Ser	Pro	Ala	Pro
		20					25				30				
Trp	Ser	Ala	Thr	Pro	Gly	Pro	Pro	Trp	Ala	Pro	Ser	Pro	Ala	Thr	Pro
	35					40				45					
Ala	Val	Arg	Leu	Pro	Ala	Pro	Ser	Pro	Thr	Ile	Ala	Ala	Ser	Val	Pro
	50				55				60						
Pro	His	Trp	Leu	Phe	Thr	Trp	Leu	Ala	Val	Ser	Val	Ser	Gln	Pro	Gly
65			70						75				80		
Ser	Glu	Ser	Xaa	Arg	Arg	Pro	Leu	Pro	Pro	Pro	Gln	Leu	Pro	Pro	Pro
			85					90					95		
Thr	Pro	Pro	Ser	Leu	Pro										
			100												

<210> 3293

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 3293

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120  
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300  
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600  
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660  
cagcagcgg gcctggtgtt ccccaacatg gaagcatatg ccgtctctcc cggccgcatg  
720

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780  
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900  
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1920  
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1980  
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2040  
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2160  
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2220  
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2340

aaaaaaaaaa aaaaaaaaaa aa  
2362

<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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Gln Arg Gly His Met Ala Cys Ser Arg Pro Pro Ser Gln Cys Glu Pro  
20 25 30  
Thr Ser Leu Pro Pro Gly Pro Pro Ala Gly Arg Arg His Leu Pro Leu  
35 40 45  
Ser Arg Arg Arg Arg Glu Met Ser Ser Asn Lys Glu Gln Arg Ser Ala  
50 55 60  
Val Phe Val Ile Leu Phe Ala Leu Ile Thr Ile Leu Ile Leu Tyr Ser  
65 70 75 80  
Ser Asn Ser Ala Asn Glu Val Phe His Tyr Gly Ser Leu Arg Gly Arg  
85 90 95  
Ser Arg Arg Pro Val Asn Leu Lys Lys Trp Ser Ile Thr Asp Gly Tyr  
100 105 110  
Val Pro Ile Leu Gly Asn Lys Thr Leu Pro Ser Arg Cys His Gln Cys  
115 120 125  
Val Ile Val Ser Ser Ser Ser His Leu Leu Gly Thr Lys Leu Gly Pro  
130 135 140  
Glu Ile Glu Arg Ala Glu Cys Thr Ile Arg Met Asn Asp Ala Pro Thr  
145 150 155 160  
Thr Gly Tyr Ser Ala Asp Val Gly Asn Lys Thr Thr Tyr Arg Val Val  
165 170 175  
Ala His Ser Ser Val Phe Arg Val Leu Arg Arg Pro Gln Glu Phe Val  
180 185 190  
Asn Arg Thr Pro Glu Thr Val Phe Ile Phe Trp Gly Pro Pro Ser Lys  
195 200 205  
Met Gln Lys Pro Gln Gly Ser Leu Val Arg Val Ile Gln Arg Ala Gly  
210 215 220  
Leu Val Phe Pro Asn Met Glu Ala Tyr Ala Val Ser Pro Gly Arg Met  
225 230 235 240  
Arg Gln Phe Asp Asp Leu Phe Arg Gly Glu Thr Gly Lys Asp Arg Glu  
245 250 255  
Lys Ser His Ser Trp Leu Ser Thr Gly Trp Phe Thr Met Val Ile Ala  
260 265 270  
Val Glu Leu Cys Asp His Val His Val Tyr Gly Met Val Pro Pro Asn  
275 280 285  
Tyr Cys Ser Gln Arg Pro Arg Leu Gln Arg Met Pro Tyr His Tyr Tyr  
290 295 300  
Glu Pro Lys Gly Pro Asp Glu Cys Val Thr Tyr Ile Gln Asn Glu His  
305 310 315 320  
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 <212> DNA  
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<400> 3296  
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 Ser Thr Gln Gly Pro Leu His Leu

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120

&lt;210&gt; 3297

&lt;211&gt; 3176

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3297

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<210> 3298

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3298

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			20					25					30		
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Cys	Val	Cys	Leu	Tyr	Val	Cys	Ile	Cys	Val	Tyr	Val	Cys	Val	Cys	His
65					70					75				80	
Phe	Val	Cys	Phe	Trp	Val	Cys	Leu	Ser	Ala	Cys	Leu	Cys	Ile	Pro	Val
			85						90					95	
Ser	Pro	Cys	Val	Cys	Leu	Cys	Val	Cys	Ile	Cys	Xaa	Cys	Leu	Cys	Met
			100					105					110		
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Glu	Gly	Glu	Arg	Lys	Gly	Ala	Thr	Asp	Gly	Ser	Ala	Trp	Lys	Val	Tyr
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Pro	His	Ser	Gln	Pro	Trp	Glu	Glu	Ser	Val	Asn	Pro	Pro	Thr	Gly	Gln
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Asp	Gln	Leu	Trp	Trp	Cys	Leu	Ala	Asp	Ser	Gly	Asn	Val	Thr	Phe	His
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Leu	Arg	Met	Gly	Leu	His	Phe	Leu	Gly	Lys	Glu	Cys	Arg	Ser	Trp	Ser
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Leu	Lys	Glu	Cys	Phe	Phe	Phe	Pro	Phe	Val	Ile	Glu	Arg	Ala	Gln	Pro
		195					200					205			
Cys	Val	His	Trp	Leu	Thr	Val	Thr	Asn	Leu	Arg	Val	Gly	Asp	Ser	His
	210				215						220				
Arg	Glu	Glu	Thr	Glu	Gly	Thr	Ala	Asp	Ser	Glu	Gln	Glu	Ser	Gly	Gly
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<210> 3299

<211> 1387

<212> DNA

<213> Homo sapiens

<400> 3299

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&lt;210&gt; 3300

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3300

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Ser Ile Gln Gln Phe Thr Glu Met Asn Leu Leu Ser Asp Tyr Arg Phe
      50           55           60
Leu Glu Asp Val Ala Arg Thr Ala Asp His Ile Ser Arg Asp Ala Phe
      65           70           75           80
Leu Lys Arg Pro Ile Ser Asn Lys Tyr Met Tyr Phe Met Lys Asn Arg
      85           90           95
Ala Arg Ser Lys Gly Ile Asn Leu Lys Leu Leu Pro Asn Gly Phe Thr
      100          105          110
Lys Arg Lys Glu Asn Ser Thr Phe Phe Asp Lys Lys Lys Gln Gln Phe
      115          120          125
Cys Trp His Val Lys Leu Gln Phe Pro Gln Ser Gln Ala Glu Tyr Ile
      130          135          140
Glu Lys Arg Val Pro Asp Asp Lys Thr Ile Asn Glu Ile Leu Lys Pro
      145          150          155          160
Tyr Ile Asp Pro Glu Lys Ser Asp Pro Val Ile Arg Gln Arg Leu Lys
      165          170          175
Ala Tyr Ile Arg Ser Gln Thr Gly Val Gln Ile Leu Met Lys Ile Glu
      180          185          190
Tyr Met Gln Gln Asn Leu Val Arg Tyr Tyr Glu Leu Asp Pro Tyr Lys
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Ser Leu Leu Asp Asn Leu Arg Asn Lys Val Ile
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&lt;210&gt; 3301

&lt;211&gt; 2109

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3301

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&lt;210&gt; 3302

<211> 323  
 <212> PRT  
 <213> Homo sapiens

<400> 3302

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Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
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Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
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Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
 65           70           75           80
Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
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Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro
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Pro Thr Cys Gly Arg Glu Ser Ser Pro Arg Glu Thr Lys Leu Arg Met
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Ala Ser Met Glu Ser Pro Xaa Val Asn Ala Phe Pro Ala Gln Asn Asn
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 165          170          175
Pro Tyr Gln Ala Ala Glu Gln Asp Met Arg Val Leu Arg Gly His Pro
 180          185          190
Gly Ser Thr Gln Leu Met Ala Leu Pro Ile Thr Gly Pro Gly Ser Pro
 195          200          205
Pro Gly Trp Ala Thr Leu Gln Ile Gln Pro Gln Thr Thr Ser Val Ser
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His Val Ala Asn Ser Ala Ile Pro Ser Ser Arg Ala Ser Ala Ser Gly
 260          265          270
Lys Asn Phe Pro Phe Pro Val Ser His Pro Ser Val Ala Gly Ala Ser
 275          280          285
His Gln Gly Arg Arg Gly Leu Ser Leu Leu Cys Phe Gly Glu Gly Ala
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<210> 3303  
 <211> 699  
 <212> DNA  
 <213> Homo sapiens

<400> 3303

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<212> PRT

<213> Homo sapiens

<400> 3304

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 35 40 45  
 Lys Lys Gly Trp Leu Thr Lys Gln Tyr Glu Asp Gly Gln Trp Lys Lys  
 50 55 60  
 His Trp Phe Val Leu Ala Asp Gln Ser Leu Arg Tyr Tyr Arg Asp Ser  
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 Val Ala Glu Glu Ala Ala Asp Leu Asp Gly Glu Ile Asp Leu Ser Ala  
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 Cys Tyr Asp Val Thr Glu Tyr Pro Val Gln Arg Asn Tyr Gly Phe Gln  
 100 105 110  
 Ile His Thr Lys Glu Gly Glu Phe Thr Leu Ser Ala Met Thr Ser Gly  
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 Ile Arg Arg Asn Trp Ile Gln Thr Ile Met Lys His Val His Pro Thr  
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 Thr Ala Pro Asp Val Thr Ser Ser Leu Pro Glu Glu Lys Asn Lys Ser  
 145 150 155 160  
 Ser Cys Ser Phe Glu Thr Cys Pro Arg Ser Thr Glu Lys Gln Glu Ala  
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 Glu Leu Gly Glu Pro Asp Pro Glu Gln Lys Arg Ser Arg Ala Arg Glu

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		Ser	Lys	Thr	Phe
				Asp	Trp
				Ala	Glu
				Phe	Arg
	195		200		205
Pro	Ile	Gln	Gln	Ala	Leu
		Ala	Gln	Glu	Arg
				Val	Gly
				Gly	Val
				Gly	Pro
	210		215		220
Ala	Asp	Thr	His	Glu	Pro
		Leu	Arg	Pro	
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&lt;210&gt; 3305

&lt;211&gt; 2717

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3305

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&lt;210&gt; 3306

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 <212> PRT  
 <213> Homo sapiens

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 Ile Ser Leu Val Met Lys Thr Pro Arg Val Ala Lys Asn Glu Ala Leu  
 35 40 45  
 Trp His Pro Thr Leu Asn Leu Pro Leu Ser Pro Gln Gly Thr Val Arg  
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 85 90 95  
 Gly Leu Asp Leu Ile Ser Val Glu Trp Arg Leu Gln His Lys Gly Arg  
 100 105 110  
 Gly Gln Leu Val Tyr Ser Trp Thr Ala Gly Gln Gly Gln Ala Val Arg  
 115 120 125  
 Lys Gly Ala Thr Leu Xaa Ala Cys Thr Thr Gly His Gly Xaa Arg Asp  
 130 135 140  
 Ala Ser Leu Thr Leu Pro Gly Leu Thr Ile Gln Asp Glu Gly Thr Tyr  
 145 150 155 160  
 Ile Cys Gln Ile Thr Thr Ser Leu Tyr Arg Ala Gln Gln Ile Ile Gln  
 165 170 175  
 Leu Asn Ile Gln Ala Ser Pro Lys Val Arg Leu Ser Leu Ala Asn Glu  
 180 185 190  
 Ala Leu Leu Pro Thr Leu Ile Cys Asp Ile Ala Gly Tyr Tyr Pro Leu  
 195 200 205  
 Asp Val Val Val Thr Trp Thr Arg Glu Glu Leu Gly Gly Ser Pro Ala  
 210 215 220  
 Gln Val Ser Gly Ala Ser Phe Ser Ser Leu Arg Gln Ser Val Ala Gly  
 225 230 235 240  
 Thr Tyr Ser Ile Ser Ser Ser Leu Thr Ala Glu Pro Gly Leu Cys Arg  
 245 250 255  
 Cys His Leu His Leu Pro Gly His Thr His Leu Ser Gly Gly Ala Pro  
 260 265 270  
 Trp Gly Gln His Pro Gly Cys Pro Thr Arg Ala Glu Asn Ser Leu Gly  
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 Ala Ser Glu Thr Ala Ser Thr Tyr Arg Thr Trp Ala Ala Ser Gly  
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<210> 3307  
 <211> 352  
 <212> DNA  
 <213> Homo sapiens

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<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

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		20				25					30				
Pro	Arg	Trp	Glu	Pro	Cys	Leu	Gly	Gln	Gly	Gly	Arg	Val	Asp	Gly	Ser
		35				40					45				
Trp	Asp	Cys	Asp	Ile	Gly	Arg	Gly	Arg	Ser	Pro	Ala	Leu	Ser	Ser	
	50				55					60					
Ala	Gly	Trp	Ala	Gly	Ile	His	Leu	Ala	Ala	Ser	Gln	Gly	Leu	Cys	Pro
65				70				75					80		
Ala	Gly	Trp	Ser	Leu	Cys	Cys	Pro	Asn	Gln	Val	Ser	Thr	Phe	Pro	Ala
			85					90					95		
Pro	Met	Arg	Arg	Glu	Gly	Gly	Arg	Trp	Trp	Leu	Gly	Trp	Arg		
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<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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<210> 3310

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3310

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			20					25					30		
Ala	Gln	Leu	Glu	Glu	Gln	Phe	Tyr	Leu	Gln	Ala	Leu	Lys	Leu	Pro	Asn
			35				40					45			
Gln	Thr	His	Pro	Asp	Val	Pro	Val	Gly	Asp	Glu	Ser	Gln	Ala	Arg	Val
	50					55				60					
Leu	His	Met	Val	Gly	Asp	Lys	Pro	Val	Phe	Ser	Phe	Gln	Pro	Arg	Gly
65					70					75				80	
His	Leu	Glu	Ile	Gly	Glu	Lys	Leu	Asp	Ile	Ile	Arg	Gln	Lys	Arg	Leu
				85					90					95	
Ser	His	Val	Ser	Gly	His	Arg	Ser	Tyr	Tyr	Leu	Arg	Gly	Ala	Gly	Ala
			100					105					110		
Leu	Leu	Gln	His	Gly	Leu	Val	Asn	Phe	Thr	Phe	Asn	Lys	Leu	Leu	Arg
			115				120					125			
Arg	Gly	Phe	Thr	Pro	Met	Thr	Val	Pro	Asp	Leu	Leu	Arg	Gly	Ala	Val
			130				135					140			
Phe	Glu	Gly	Cys	Gly	Met	Thr	Pro	Asn	Ala	Asn	Pro	Ser	Gln	Ile	Tyr
145					150					155				160	
Asn	Ile	Asp	Pro	Ala	Arg	Phe	Lys	Asp	Leu	Asn	Leu	Ala	Gly	Thr	Ala
				165					170					175	
Glu	Val	Gly	Leu	Ala	Gly	Tyr	Phe	Met	Asp	His	Thr	Val	Ala	Phe	Arg
			180					185					190		
Asp	Leu	Pro	Val	Arg	Met	Val	Cys	Ser	Ser	Thr	Cys	Tyr	Arg	Ala	Glu
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<210> 3311

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3311

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 300  
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 486

&lt;210&gt; 3312

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3312

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		20						25				30			
Phe	Tyr	Glu	Asp	Cys	Thr	Ala	Ser	Ile	Trp	Glu	Tyr	Glu	Asp	Asp	Phe
	35					40					45				
Gln	Ile	Gln	Arg	Ser	Pro	Asn	Arg	Trp	Ser	Ser	Val	Phe	Trp	Lys	Val
	50					55					60				
Gly	Leu	Ile	Ser	Gly	Thr	Val	Phe	Val	Ile	Leu	Gly	Leu	Thr	Val	Leu
65					70				75					80	
Ala	Val	Gly	Phe	Leu	Val	Pro	Pro	Lys	Ile	Glu	Ala	Phe	Gly	Glu	Ala
				85				90						95	
Asp	Phe	Val	Val	Val	Asp										
				100											

&lt;210&gt; 3313

&lt;211&gt; 1791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3313

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1791

&lt;210&gt; 3314

&lt;211&gt; 537

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3314

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 Ala Arg Thr Ala Val Lys Arg Arg Pro Gly Ala Gly Arg Val Gly Gly  
 35 40 45  
 Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His  
 50 55 60  
 His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu  
 65 70 75 80  
 Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr  
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 Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu  
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 Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp  
 115 120 125  
 Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr  
 130 135 140  
 Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly  
 145 150 155 160  
 Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr  
 165 170 175  
 Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg  
 180 185 190  
 Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu  
 195 200 205  
 Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp  
 210 215 220  
 Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr  
 225 230 235 240  
 Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys  
 245 250 255  
 Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala  
 260 265 270  
 Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser  
 275 280 285  
 His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg  
 290 295 300  
 Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser  
 305 310 315 320  
 Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly  
 325 330 335  
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 340 345 350  
 Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly  
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 Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val  
 370 375 380  
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<210> 3316  
<211> 187  
<212> PRT  
<213> Homo sapiens

<400> 3316  
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Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro Glu Val Val Leu  
35 40 45  
Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu Val Val Lys Lys  
50 55 60  
Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg Leu Phe Ala Val  
65 70 75 80  
Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser Glu Asp Leu Ile  
85 90 95  
Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu Arg Ile Arg Leu  
100 105 110  
Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr Leu Leu Gly Lys  
115 120 125  
Pro Leu Leu Gly Lys Asp Leu Val Arg Val Glu Ala Thr Val Ile Glu  
130 135 140  
Lys Thr Glu Ser Trp Pro Arg Ile Ile Met Arg Phe Arg Lys Arg Lys  
145 150 155 160  
Asn Phe Lys Lys Lys Arg Ile Val Thr Thr Pro Gln Thr Val Leu Arg  
165 170 175  
Ile Asn Ser Ile Glu Ile Ala Pro Cys Leu Leu  
180 185

<210> 3317  
<211> 1665  
<212> DNA  
<213> Homo sapiens

<400> 3317  
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120  
aaaagaagct gagaaaaaaa gatgccaaga ctggaagcat cgaagatggt gagccctttc  
180  
caagtgtctac gttatgaagc tgccaaatta agaacactga gcaaatgtaa ttctcccgta  
240  
gttgggaaag attatattta ttttcttctt acttttttaat gtctagatcc agaataaag  
300  
aagtttttag aaacctactg tgtggaggaa gagaagacca gtgccaaccc tgagactctg  
360  
ctgggggaga tggaggcgaa gacaagagag ctcattgcta gaagaaccac acctcttttg  
420

gaatatatta aaaatagaaa attagaaaag cagagaattc gagaagagaa gcgagaagaa  
 480  
 cggaggagga gagagttaga aaagaaacgt ttgcgggaag aggaaaaaag aagaagaaga  
 540  
 gaagaagaaa gatgcaaaaa aaaagagaca gataaacaga agaaaattgc agagaaagaa  
 600  
 gtaaggatta agcttcttaa gaaaccagaa aaggagagagg aaccaaccac agagaaacca  
 660  
 aaagaaagag gagaggagat tgatactgga ggtggcaagc aggaatcctg tgcccccggt  
 720  
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 780  
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 840  
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 900  
 tccagaagga gtgaggatga gcagagatgg gggaaaggac ctggccaaga cagaggggaag  
 960  
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 1020  
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 1140  
 cccacttg ccttgtgtct tggggaacgc agtgctttga gcattttcaa gagcagtttt  
 1200  
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 1260  
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 1620  
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 1665

&lt;210&gt; 3318

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3318

Met	Glu	Ala	Lys	Thr	Arg	Glu	Leu	Ile	Ala	Arg	Arg	Thr	Thr	Pro	Leu
1				5					10					15	
Leu	Glu	Tyr	Ile	Lys	Asn	Arg	Lys	Leu	Glu	Lys	Gln	Arg	Ile	Arg	Glu
			20					25					30		
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu

35 40 45  
 Arg Glu Glu Glu Lys Arg Arg Arg Arg Glu Glu Glu Arg Cys Lys Lys  
 50 55 60  
 Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile  
 65 70 75 80  
 Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys  
 85 90 95  
 Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu  
 100 105 110  
 Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser  
 115 120 125  
 Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His  
 130 135 140  
 Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr  
 145 150 155 160  
 His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg  
 165 170 175  
 Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly  
 180 185 190  
 Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu  
 195 200 205  
 Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala  
 210 215 220  
 Pro Arg Lys Glu Arg Leu Ala Asn Lys Val Phe Ile Lys Pro Lys Lys  
 225 230 235 240  
 Lys Asn Val Ser Gly Cys Leu Lys Val Gln Ala Ala Cys  
 245 250

&lt;210&gt; 3319

&lt;211&gt; 1541

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3319

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 60  
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 120  
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 180  
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 240  
 gtcccaaagg ccggcaagat ggtgtctctg atgatctgtc gcctggtggt gctggtgttt  
 300  
 gggatgctgt gtccagctta tgcttctat aaggctgtga agaccaagaa cattcgtgaa  
 360  
 tatgtgcggt ggatgatgta ctggattgtt tttgcactct tcatggcagc agagatcgtt  
 420  
 acagacattt ttatctctg gttcccttct tactatgaga tcaagatggc ctctgtgctg  
 480  
 tggctgctct caccctacac caaggcgccc agcctgcttt accgcaagtt tgtccaccgc  
 540  
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 600



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 720  
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 780  
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 1500  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a  
 1541

&lt;210&gt; 3320

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3320

Val Ser Trp Met Ile Cys Arg Leu Val Val Leu Val Phe Gly Met Leu  
 1 5 10 15  
 Cys Pro Ala Tyr Ala Ser Tyr Lys Ala Val Lys Thr Lys Asn Ile Arg  
 20 25 30  
 Glu Tyr Val Arg Trp Met Met Tyr Trp Ile Val Phe Ala Leu Phe Met  
 35 40 45  
 Ala Ala Glu Ile Val Thr Asp Ile Phe Ile Ser Trp Phe Pro Phe Tyr  
 50 55 60  
 Tyr Glu Ile Lys Met Ala Phe Val Leu Trp Leu Ser Pro Tyr Thr  
 65 70 75 80  
 Lys Gly Ala Ser Leu Tyr Arg Lys Phe Val His Pro Ser Leu Ser  
 85 90 95  
 Arg His Glu Lys Glu Ile Asp Ala Tyr Ile Val Gln Ala Lys Glu Arg  
 100 105 110  
 Ser Tyr Glu Thr Val Leu Ser Phe Gly Lys Arg Gly Leu Asn Ile Ala

115	120	125
Ala Ser Ala Ala Val Gln Ala Ala Thr Lys Ser Gln Gly Ala Leu Ala		
130	135	140
Gly Arg Leu Arg Ser Phe Ser Met Gln Asp Leu Arg Ser Ile Ser Asp		
145	150	155
Ala Pro Ala Pro Ala Tyr His Asp Pro Leu Tyr Leu Glu Asp Gln Val		
165	170	175
Ser His Arg Arg Pro Pro Ile Gly Tyr Arg Ala Gly Gly Leu Gln Asp		
180	185	190
Ser Asp Thr Glu Asp Glu Cys Trp Ser Asp Thr Glu Ala Val Pro Arg		
195	200	205
Ala Pro Ala Arg Pro Arg Glu Lys Pro Leu Ile Arg Ser Gln Ser Leu		
210	215	220
Arg Val Val Lys Arg Lys Pro Pro Val Arg Glu Gly Thr Ser Arg Ser		
225	230	235
Leu Lys Val Arg Thr Arg Lys Lys Thr Val Pro Ser Asp Val Asp Ser		
245	250	255

&lt;210&gt; 3321

&lt;211&gt; 1536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3321

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 240  
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 420  
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 480  
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 660  
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 720  
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 780  
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 900

aaatcccatt ctagaaggaa aagatcacaa tcaaaacaca ggagtagatc ccataataga  
 960  
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 1440  
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 1500  
 tagatctccg tccccaggga gaaataagaa ggataa  
 1536

&lt;210&gt; 3322

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3322

Xaa	Arg	Val	Val	Asp	Val	Gly	Glu	Arg	Glu	Gly	Asn	Gly	Ser	Gly	Ile
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Gly	Met	Asn	Ser	Gly	Gly	Gly	Phe	Gly	Leu	Gly	Leu	Gly	Phe	Gly	Leu
			20					25					30		
Thr	Pro	Thr	Ser	Val	Ile	Gln	Val	Thr	Asn	Leu	Ser	Ser	Ala	Val	Thr
		35				40						45			
Ser	Glu	Gln	Met	Arg	Thr	Leu	Phe	Ser	Phe	Leu	Gly	Glu	Ile	Glu	Glu
	50					55					60				
Leu	Arg	Leu	Tyr	Pro	Pro	Asp	Asn	Ala	Pro	Leu	Ala	Phe	Ser	Ser	Lys
65					70					75				80	
Val	Cys	Tyr	Val	Lys	Phe	Arg	Asp	Pro	Ser	Ser	Val	Gly	Val	Ala	Gln
				85				90						95	
His	Leu	Thr	Asn	Thr	Val	Phe	Ile	Asp	Arg	Ala	Leu	Ile	Val	Val	Pro
			100					105					110		
Cys	Ala	Glu	Gly	Lys	Ile	Pro	Glu	Glu	Ser	Lys	Ala	Leu	Ser	Leu	Leu
		115					120					125			
Ala	Pro	Ala	Pro	Thr	Met	Thr	Ser	Leu	Met	Pro	Gly	Ala	Gly	Leu	Leu
	130					135						140			
Pro	Ile	Pro	Thr	Pro	Asn	Pro	Leu	Thr	Thr	Leu	Gly	Val	Ser	Leu	Ser
145					150					155				160	
Ser	Leu	Gly	Ala	Ile	Pro	Ala	Ala	Ala	Leu	Asp	Pro	Asn	Ile	Ala	Thr
				165				170						175	
Leu	Gly	Glu	Ile	Pro	Gln	Pro	Pro	Leu	Met	Gly	Asn	Val	Asp	Pro	Ser
			180					185					190		
Lys	Ile	Asp	Glu	Ile	Arg	Arg	Thr	Val	Tyr	Val	Gly	Asn	Leu	Asn	Ser

195                      200                      205  
 Gln Thr Thr Thr Ala Asp Gln Leu Leu Glu Phe Phe Lys Gln Val Gly  
 210                      215                      220  
 Glu Val Lys Phe Ala Asp Gly Arg Ile Asn His Ser Asn Asn Ala Ile  
 225                      230                      235                      240  
 Val Lys Pro Pro Glu Met Thr Pro Gln Ala Ala Ala Lys Glu Leu Glu  
 245                      250                      255  
 Glu Val Met Lys Arg Val Arg Glu Ala Gln Ser Phe Ile Ser Ala Ala  
 260                      265                      270  
 Ile Glu Pro Glu Ser Gly Lys Ser Asn Glu Arg Lys Gly Gly Arg Ser  
 275                      280                      285  
 Arg Ser His Thr Arg Ser Lys Ser Arg Ser Ser Ser Lys Ser His Ser  
 290                      295                      300  
 Arg Arg Lys Arg Ser Gln Ser Lys His Arg Ser Arg Ser His Asn Arg  
 305                      310                      315                      320  
 Ser Arg Ser Arg Gln Lys Asp Arg Arg Arg Ser Lys Ser Pro His Lys  
 325                      330                      335  
 Lys Arg Ser Lys Ser Arg Glu Arg Arg Lys Ser Arg Ser Arg Ser His  
 340                      345                      350  
 Ser Arg Asp Lys Arg Lys Asp Thr Arg Glu Lys Ile Lys Glu Lys Glu  
 355                      360                      365  
 Arg Val Lys Glu Lys Asp Arg Glu Lys Glu Arg Glu Arg Glu Lys Glu  
 370                      375                      380  
 Arg Glu Lys Glu Lys Glu Arg Gly Lys Asn Lys Asp Arg Asp Lys Glu  
 385                      390                      395                      400  
 Arg Glu Lys Asp Arg Glu Lys Asp Lys Glu Lys Asp Arg Glu Arg Glu  
 405                      410                      415  
 Arg Glu Lys Glu His Glu Lys Asp Arg Asp Lys Glu Lys Glu Lys Glu  
 420                      425                      430  
 Gln Asp Lys Glu Lys Glu Arg Glu Lys Asp Arg Ser Lys Glu Ile Asp  
 435                      440                      445  
 Glu Lys Lys Lys Glu Gly  
 450

&lt;210&gt; 3323

&lt;211&gt; 949

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3323

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 gcaagtggca tggcttccca gttataaaat ctacagctctt gagagggcct cagagctaac  
 120  
 ttctacccca ggtactgtgc cttgcacaac ataaggcaag ccagcctctg actgaacatg  
 180  
 cctggaaagg agttcaatat cttacttaac atctctcagg aagatgtgcc atcttcaact  
 240  
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 300  
 ggtggagaga aagatctgga aatacttgag gttattacat actagattag cttctaattg  
 360  
 gaaccatttt tcttttaaca gtgataaatt attatttccg aagttaactg ttcccttgg  
 420

cgtgatacac actcgattaa caaacatact gttgtatattt ttccagtttt gtttggtat  
 480  
 gccaccacag tcatccccag ggtctataca tactatgttt caactgtatt atttgccatt  
 540  
 tttggcatta gaatgcttcg ggaaggctta aagatgagcc ctgatgaggg tcaagaggaa  
 600  
 ctggaagaag ttcaagctga attaaagaag aaagatgaag aagtaagcca tggcactgtt  
 660  
 gatctggacc aaaaaggcac tcaactagga ataaacactc tacagaggtt tctcagtggc  
 720  
 cccatctgtg tgatatgagg ggctacacaa aaatagcttc ttttgctttg ttctgttctt  
 780  
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 gatgaatact gaacacaggt aatcagtttc cttaattagg ttgattataa gctcctgaaa  
 900  
 agcaggaact gaattttata attttacctg ttttctccca tggagtctt  
 949

&lt;210&gt; 3324

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3324

Ile	Ile	Ile	Ser	Glu	Val	Asn	Cys	Ser	Leu	Gly	Arg	Asp	Thr	His	Ser
1				5					10					15	
Ile	Asn	Lys	His	Thr	Val	Val	Phe	Phe	Pro	Val	Leu	Phe	Gly	Tyr	Ala
			20					25					30		
Thr	Thr	Val	Ile	Pro	Arg	Val	Tyr	Thr	Tyr	Tyr	Val	Ser	Thr	Val	Leu
		35				40					45				
Phe	Ala	Ile	Phe	Gly	Ile	Arg	Met	Leu	Arg	Glu	Gly	Leu	Lys	Met	Ser
50					55					60					
Pro	Asp	Glu	Gly	Gln	Glu	Leu	Glu	Glu	Val	Gln	Ala	Glu	Leu	Lys	
65				70				75					80		
Lys	Lys	Asp	Glu	Glu	Val	Ser	His	Gly	Thr	Val	Asp	Leu	Asp	Gln	Lys
			85					90					95		
Gly	Thr	Gln	Leu	Gly	Ile	Asn	Thr	Leu	Gln	Arg	Phe	Leu	Ser	Gly	Pro
		100						105					110		
Ile	Cys	Val	Ile	Cys	Gly	Ala	Thr	Gln	Lys						
		115					120								

&lt;210&gt; 3325

&lt;211&gt; 5055

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3325

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 120  
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 180

ctcaccgcgag cgacccaggc cgcacggcaa gttcggggcgg gacggcggcc gccgcgcgct  
240  
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300  
cgccgcctgg gcagcaagtg atccacgtca cgcaggacct agacacagac ctggaagccc  
360  
tcttcaactc tgtcatgaat ccgaagccta gctcgtggcg gaagaagatc ctgccggagt  
420  
ctttctttaa ggagcctgat tcgggctcgc actcgcgcca gtccagcacc gactcgtcgg  
480  
gcggccacca ggggcctcga ctggctgggg ggtgcccagc atgtccgctc gcactcgtcg  
540  
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gcgcacctcc gccagcagtc ctacgacgtg accgacgagc tgccactgcc cccgggctgg  
660  
gagatgacct tcacggccac tggccagagg tacttctca atcacataga aaaaatcacc  
720  
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780  
gccgtcagtt ccacaccagt gcctcagagg tccatggcag tatcccagcc aaatctcgtg  
840  
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900  
actcagaacc caccgcagg gctcatgagt atgccaatg cgctgaccac tcagcagcag  
960  
cagcagcaga aactgcggct tcagagaatc cagatggaga gagaaaggat tcgaatgcgc  
1020  
caagaggagc tcatgaggca ggaagctgcc ctctgtcgac agtccccat ggaagctgag  
1080  
actcttggcc cagttcaggc tgctgtcaac ccaccacga tgaccacaga catgagatcc  
1140  
atcactaata atagctcaga tcctttcctc aatggagggc catatcattc gaggagcag  
1200  
agcactgaca gtggcctggg gttaggggtgc tacagtgtcc ccacaactcc ggaggacttc  
1260  
ctcagcaatg tggatgagat ggatacagga gaaaacgcag gacaaacacc catgaacatc  
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1800

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<211> 254

<212> PRT

<213> Homo sapiens

<400> 3326

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Thr	Gln	Gln	Gln	Gln	Gln	Gln	Lys	Leu	Arg	Leu	Gln	Arg	Ile	Gln	Met
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<210> 3327

<211> 2263

<212> DNA

<213> Homo sapiens

<400> 3327

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<211> 521

<212> PRT

<213> Homo sapiens

<400> 3328

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Gly Tyr Val Ser Asp Thr Glu Thr Ser Val Val Trp Asn Asn Glu His		
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Val Lys Thr Asp Trp Asp Arg Ala Lys Ser Gln Lys Met Arg Glu Gln		
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&lt;210&gt; 3329

&lt;211&gt; 705

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3329

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<211> 235

<212> PRT

<213> Homo sapiens

<400> 3330

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<211> 1644

<212> DNA

<213> Homo sapiens

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1644

<210> 3332

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3332

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Met Asn Ser Gly Arg Pro Glu Thr Met Glu Asn Leu Pro Ala Leu Tyr
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          20           25           30
Ile Lys Ile Pro Gly Cys Arg Lys Gln Gly Leu Val His Arg Thr His
        35           40           45
Met Ser Ser Cys Arg Val Asp Lys Pro Ser Glu Ile Val Asp Val Gly
 50           55           60
Asp Lys Val Trp Val Lys Leu Ile Gly Arg Glu Met Lys Asn Asp Arg
65           70           75           80
Ile Lys Val Ser Leu Ser Met Lys Val Val Asn Gln Gly Thr Gly Lys
          85           90           95
Asp Leu Asp Pro Asn Asn Val Ser Leu Ser Lys Lys Arg Gly Gly Gly
        100           105           110
Asp Pro Ser Arg Ile Thr Leu Gly Arg Arg Ser Pro Leu Arg Leu Ser
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<210> 3333

<211> 2422

<212> DNA

<213> Homo sapiens

<400> 3333

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120
actgttgaag ttggtgagga cctccacatg caccacgttc gtgaccggga gatgctgaa
180
gctttggagt ttaacctttc tgccaatcca gagtcaagca caatattcca gaggaactct
240
caaacagaag ctttggagtt taacctttct gccaatccag aggcaagcac aatattccag
300
aggaactctc aaacagatgt ttagaataa agaagaagca actgtacaaa ccatgtatct
360
gctgtgcgtt tcagtcaaca atacagcttg tgttcgacaa tttccttga tgacagcaca
420
gccatccagc attatcttac aatgacaata atatctgtga ccttggagat acctcatcat
480
atcacacaaa gagatgcaga tagaactttg agcatacctg atgaacagtt aactcattt
540
gcggtttcca ccgtgcacat tatgaagaaa agaaatggag gtgggagttt aaataactat
600
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660

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cccactgcc aacacacccac ccccgtttgc aagcgggtcca tgcgctgggc caacctgttt  
720  
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780  
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2100  
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2160  
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tagtctcagg ccctcctggc cacattgccc aagtcacaca ggcttctgta ttatgtattt  
2280



agataaaatg tgtgaaaaca tatttgaaat aaagttcata aatatgcaaa aaaaaaaaaa  
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 2400  
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 2422

<210> 3334  
 <211> 672  
 <212> PRT  
 <213> Homo sapiens

<400> 3334  
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 20 25 30  
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 35 40 45  
 His Met His His Val Arg Asp Arg Glu Met Pro Glu Ala Leu Glu Phe  
 50 55 60  
 Asn Leu Ser Ala Asn Pro Glu Ser Ser Thr Ile Phe Gln Arg Asn Ser  
 65 70 75 80  
 Gln Thr Glu Ala Leu Glu Phe Asn Pro Ser Ala Asn Pro Glu Ala Ser  
 85 90 95  
 Thr Ile Phe Gln Arg Asn Ser Gln Thr Asp Val Val Glu Ile Arg Arg  
 100 105 110  
 Ser Asn Cys Thr Asn His Val Ser Ala Val Arg Phe Ser Gln Gln Tyr  
 115 120 125  
 Ser Leu Cys Ser Thr Ile Phe Leu Asp Asp Ser Thr Ala Ile Gln His  
 130 135 140  
 Tyr Leu Thr Met Thr Ile Ile Ser Val Thr Leu Glu Ile Pro His His  
 145 150 155 160  
 Ile Thr Gln Arg Asp Ala Asp Arg Thr Leu Ser Ile Pro Asp Glu Gln  
 165 170 175  
 Leu His Ser Phe Ala Val Ser Thr Val His Ile Met Lys Lys Arg Asn  
 180 185 190  
 Gly Gly Gly Ser Leu Asn Asn Tyr Ser Ser Ser Ile Pro Ser Thr Pro  
 195 200 205  
 Ser Thr Ser Gln Glu Asp Pro Gln Phe Ser Val Pro Pro Thr Ala Asn  
 210 215 220  
 Thr Pro Thr Pro Val Cys Lys Arg Ser Met Arg Trp Ser Asn Leu Phe  
 225 230 235 240  
 Thr Ser Glu Lys Gly Ser His Pro Asp Lys Glu Arg Lys Ala Pro Glu  
 245 250 255  
 Asn His Ala Asp Thr Ile Gly Ser Gly Arg Ala Ile Pro Ile Lys Gln  
 260 265 270  
 Gly Met Leu Leu Lys Arg Ser Gly Lys Trp Leu Lys Thr Trp Lys Lys  
 275 280 285  
 Lys Tyr Val Thr Leu Cys Ser Asn Gly Met Leu Thr Tyr Tyr Ser Ser  
 290 295 300  
 Leu Gly Asp Tyr Met Lys Asn Ile His Lys Lys Glu Ile Asp Leu Gln  
 305 310 315 320  
 Thr Ser Thr Ile Lys Val Pro Gly Lys Trp Pro Ser Leu Ala Thr Ser

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          325          330          335
Ala Cys Thr Pro Ile Ser Ser Ser Lys Ser Asn Gly Leu Ser Lys Asp
          340          345          350
Met Asp Thr Gly Leu Gly Asp Ser Ile Cys Phe Ser Pro Ser Ile Ser
          355          360          365
Ser Thr Thr Ser Pro Lys Leu Asn Pro Pro Pro Ser Pro His Ala Asn
          370          375          380
Lys Lys Lys His Leu Lys Lys Lys Ser Thr Asn Asn Phe Met Ile Val
385          390          395          400
Ser Ala Thr Gly Gln Thr Trp His Phe Glu Ala Thr Thr Tyr Glu Glu
          405          410          415
Arg Asp Ala Trp Val Gln Ala Ile Gln Ser Gln Ile Leu Ala Ser Leu
          420          425          430
Gln Ser Cys Glu Ser Ser Lys Ser Lys Ser Gln Leu Thr Ser Gln Ser
          435          440          445
Glu Ala Met Ala Leu Gln Ser Ile Gln Asn Met Arg Gly Asn Ala His
          450          455          460
Cys Val Asp Cys Glu Thr Gln Asn Pro Lys Trp Ala Ser Leu Asn Leu
465          470          475          480
Gly Val Leu Met Cys Ile Glu Cys Ser Gly Ile His Arg Ser Leu Gly
          485          490          495
Thr Arg Leu Ser Arg Val Arg Ser Leu Glu Leu Asp Asp Trp Pro Val
          500          505          510
Glu Leu Arg Lys Val Met Ser Ser Ile Gly Asn Glu Leu Ala Asn Ser
          515          520          525
Ile Trp Glu Glu Ser Ser Gln Gly Arg Thr Lys Pro Ser Val Asp Ser
          530          535          540
Thr Arg Glu Glu Lys Glu Arg Trp Ile Arg Ser Lys Tyr Glu Glu Lys
545          550          555          560
Leu Phe Leu Ala Pro Leu Pro Cys Thr Glu Leu Ser Leu Gly Gln Gln
          565          570          575
Leu Leu Arg Ala Thr Ala Asp Glu Asp Leu Gln Thr Ala Ile Leu Leu
          580          585          590
Leu Ala His Gly Ser Arg Glu Glu Val Asn Glu Thr Cys Gly Glu Gly
          595          600          605
Asp Gly Cys Thr Ala Leu His Leu Ala Cys Arg Lys Gly Asn Val Val
          610          615          620
Leu Ala Gln Leu Leu Ile Trp Tyr Gly Val Asp Val Met Ala Arg Asp
625          630          635          640
Ala His Gly Asn Thr Ala Leu Thr Tyr Ala Arg Gln Ala Ser Ser Gln
          645          650          655
Glu Cys Ile Asn Val Leu Leu Gln Tyr Gly Cys Pro Asp Lys Cys Val
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&lt;210&gt; 3335

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3335

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ggcctcttca ggagtgaagt ccgggacctc ctccccaggg ccctgtcat gctgtctcgg
120

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cccagactgc ttgttgaagg ggttgagggtg ggcctgccgg aaacggggcca gcttctcatc  
 180  
 atattccata gcatcccacc tgcctcgctt gccagggccc aggggctcgc agggacagga  
 240  
 tggccattcc tctagggctg ctggccacgg aagcctggcc gtgggttcgg cacctgctga  
 300  
 ccgcccctc gcatttgccc tgagacaggg ctggacagcc aggattaccg ctgtgccgag  
 360  
 tgccgggcgc ccattctctt ggggggtgtg cccagtggag ccaggcagtg cgactacacc  
 420  
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 477

<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

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1				5					10					15	
Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile	Ser	Leu	Arg	Gly	Val	Pro	Ser
			20					25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
			35				40					45			
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
	50					55									

<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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 aaaaagagaa agagagacac cccacagaga ggggggaagg aggttagatg gggcagtctt  
 120  
 agcttagcct ccaaagacac agatagagtg agagagagag acagagagag acacagagac  
 180  
 agacagagac caaacagaa gcggcaaacg gcaaaaacga agcagaatca atgcaagtta  
 240  
 gagaaaaaaaa taaaactaaa catcagagca gggaaaagtc atctactccg tatcacacct  
 300  
 gtgtattagc ttaaccagaa ataagctgga agaggagttc agtagcctct cagcccccta  
 360  
 aagatgttgg tcataccccc tctttcaccg tctgagtcga gaggacacca agccaaacaa  
 420  
 actgtgcccc aaactgggtc atctagtcct cccaggtcct tccttgctaa ctcgaggaaa  
 480  
 caaggaaaac caactttgga tggcaacttc aacaaggtaa ccctccttcc ttcaatggcc  
 540  
 agactgatgc ccactgacaa tggctttgag atgcttggac agcagactgt catgtcaaga  
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 679

<210> 3338

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3338

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 20 25 30  
 Lys Glu Val Arg Trp Gly Ser Leu Ser Leu Ala Ser Lys Asp Thr Asp  
 35 40 45  
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro  
 50 55 60  
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu  
 65 70 75 80  
 Glu Lys Lys Ile Lys Leu Asn Ile Arg Ala Gly Lys Ser His Leu Leu  
 85 90 95  
 Arg Ile Thr Pro Val Tyr  
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<210> 3339

<211> 1341

<212> DNA

<213> Homo sapiens

<400> 3339

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 120  
 agaagccagt tccatccagg atccactatc tacacaccta tgttacaaca ttatatcaaa  
 180  
 tctggtatct gaagaaaaga tacacattta atatgttcat ttaagttacg tattttgcag  
 240  
 aaagattaaa aattcattca cacaaaactc aaaaactgta ttaaaagttt gaatataaaa  
 300  
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 360  
 gtaaatgtaa tgatatctgt taccaataaa acgcattcgt ttattcaatg taagtaagtt  
 420  
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 480  
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 540  
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 600  
 actatccgat atatttttaa tatatatata tatatatgtt cttctggctg tagtaatgca  
 660

ctgtaaagct atttcacagt gcaaaatgat gaaaccagcc caaatgaagg ctgcataata  
 720  
 acaattctga tacaagaaaa tattgacaga gttactggaa cgtgtaacag tagttttttt  
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 840  
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 960  
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 1260  
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 1320  
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 1341

<210> 3340

<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

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Ser	Val	Asn	Ile	Phe	Leu	Tyr	Gln	Asn	Cys	Tyr	Tyr	Ala	Ala	Phe	Ile
		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35				40					45				
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
	50					55				60					
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
65				70				75						80	
Ala	Tyr	Thr	Gln	Asn	His										
				85											

<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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 120

ctggagcatg accacagacc cattcaggga ggctggcgga ctcttcaccc tggacagtcc  
 180  
 cttactgtat gtcaagtaaa gctgagaatg aagcggagag catcagacag aggagctggg  
 240  
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 accgagtact cactgctgtc tctcctgcac acgcaggatg gcgtgggtgca ccaccacggc  
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 600  
 aagatgaaga agcgcacatctg cctcgtcctg gactgcctct gtgctcatga cttcagcgat  
 660  
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 720  
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 780  
 aatatcgtgc acagagacct gaagctgggg aacatgggtgc tcaacaagag gacacatcgg  
 840  
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 960  
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 1080  
 accattcctg aggatggacg ggtttctgag aacaccgtgt gtctcatccg ga  
 1132

&lt;210&gt; 3342

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3342

Met	Lys	Arg	Arg	Ala	Ser	Asp	Arg	Gly	Ala	Gly	Glu	Thr	Ser	Ala	Arg
1				5					10					15	
Ala	Lys	Ala	Leu	Gly	Ser	Gly	Ile	Ser	Gly	Asn	Asn	Ala	Lys	Arg	Ala
		20						25					30		
Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
		35					40					45			
Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Asp	Phe	Tyr	Gln
	50					55					60				
Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
65				70					75				80		
Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
			85					90					95		
Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu

	100		105		110										
Phe	Gln	Asp	Arg	Thr	Cys	Glu	Ile	Val	Glu	Asp	Thr	Glu	Ser	Ser	Arg
	115						120						125		
Met	Val	Lys	Lys	Met	Lys	Lys	Arg	Ile	Cys	Leu	Val	Leu	Asp	Cys	Leu
	130						135					140			
Cys	Ala	His	Asp	Phe	Ser	Asp	Lys	Thr	Ala	Asp	Leu	Ile	Asn	Leu	Gln
145						150				155					160
His	Tyr	Val	Ile	Lys	Glu	Lys	Arg	Leu	Ser	Glu	Arg	Glu	Thr	Val	Val
				165					170					175	
Ile	Phe	Tyr	Asp	Val	Val	Arg	Val	Val	Glu	Ala	Leu	His	Gln	Lys	Asn
			180						185				190		
Ile	Val	His	Arg	Asp	Leu	Lys	Leu	Gly	Asn	Met	Val	Leu	Asn	Lys	Arg
		195					200					205			
Thr	His	Arg	Ile	Thr	Ile	Thr	Asn	Phe	Cys	Leu	Gly	Lys	His	Leu	Val
	210					215						220			
Ser	Glu	Gly	Asp	Leu	Leu	Lys	Asp	Gln	Arg	Gly	Ser	Pro	Ala	Tyr	Ile
225						230				235					240
Ser	Pro	Asp	Val	Leu	Ser	Gly	Arg	Pro	Tyr	Arg	Gly	Lys	Pro	Ser	Asp
			245						250				255		
Met	Trp	Ala	Leu	Gly	Val	Val	Leu	Phe	Thr	Met	Leu	Tyr	Gly	Gln	Phe
		260						265					270		
Pro	Phe	Tyr	Asp	Ser	Ile	Pro	Gln	Glu	Leu	Phe	Arg	Lys	Ile	Lys	Ala
		275					280					285			
Ala	Glu	Tyr	Thr	Ile	Pro	Glu	Asp	Gly	Arg	Val	Ser	Glu	Asn	Thr	Val
	290					295						300			
Cys	Leu	Ile	Arg												
305															

&lt;210&gt; 3343

&lt;211&gt; 594

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3343

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 120  
 ttcagcatga actgggtcgt gggcagcgcg gacctggaga ttatcaacgc caccactggg  
 180  
 cggaggagct gtggggggccc atcccggctc tgcaagcacg tgctgtctgc acggtgggcg  
 240  
 cggctgtatg gcaggctgag cacacggaca ccagccctg gagacacgcc ctccatgtac  
 300  
 tgtgaggcca agctgggggc gcacacctac cagtctgtga aacagcagct gttcaaggcc  
 360  
 tttcagaagg ctggcctggg cacctgggtg aggaaccac cggagcagca gcagtttcta  
 420  
 ctgactctct aggctgcggg ctcttggtg ctggagctga gcgggacgct ggagggatgg  
 480  
 gaccgtgtct ggggggacgc gtggcgggtc ggccggttcc ctgcattcgt tttactttgg  
 540  
 tgtcccagaa acacgcgagt gtgcaatgtt tggacgagca acaaaaaaaaa aaaa  
 594

<210> 3344  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 3344  
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 Tyr Arg His Asn Arg Pro Leu Leu Ser Gly Val Ser Asp Thr Glu Ala  
 20 25 30  
 Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly  
 35 40 45  
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys  
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 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala  
 65 70 75 80  
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr  
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 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser  
 100 105 110  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3346

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3346

Met	Glu	Tyr	Asp	Glu	Lys	Leu	Ala	Arg	Phe	Arg	Gln	Ala	His	Leu	Asn
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		20					25						30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35					40					45			
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
65				70				75						80	
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
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Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
		100						105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
	115						120					125			
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
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Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
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Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
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Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

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&lt;210&gt; 3347

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3347

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1260

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 2160  
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 <211> 288  
 <212> PRT  
 <213> Homo sapiens

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 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met  
 50 55 60  
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 65 70 75 80  
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val  
 85 90 95  
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu  
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His  
 115 120 125  
 Val Ala Gly Ala Ala Tyr Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp  
 130 135 140  
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe  
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 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu  
 165 170 175  
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg  
 180 185 190  
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp  
 195 200 205  
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu  
 210 215 220  
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu  
 225 230 235 240  
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu  
 245 250 255  
 Pro Phe Thr Thr Pro Ala Pro Lys Lys Pro Gly Asn Pro Ser Arg Ala  
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&lt;210&gt; 3349

&lt;211&gt; 1132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3349

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 1132

&lt;210&gt; 3350

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3350

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Asp	Leu	Val	Ser	Val	Lys	Lys	Ser	Leu	Gly	Arg	Asn	Arg	Leu	Leu	Pro
			20					25					30		
Gln	Gly	Leu	Ala	Val	Tyr	Ala	Ser	Pro	Glu	Asn	Lys	Lys	Leu	Phe	Glu
		35					40					45			
Glu	Glu	Lys	Leu	Leu	Arg	Gln	Glu	Gly	Lys	Leu	Glu	Lys	Ile	Gln	Thr
	50					55					60				
Lys	Ala	Gly	Glu	Ala	Thr	Val	Lys	Phe	Leu	Lys	Ser	Cys	Arg	Leu	Glu
65					70				75					80	
Val	Gly	Met	Lys	Asn	Asn	Val	Lys	Trp	Glu	Leu	Asn	Pro	Glu	Ile	Val
				85				90						95	
Ala	Arg	His	Phe	Phe	Lys	Asn	Leu	Gly	Val	Val	Val	Ala	Pro	His	Thr
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Leu	Lys	Leu	Pro	Ala	Glu	Pro	Ile	Thr	Arg	Trp	Gly	Glu	Tyr	Trp	Cys
		115					120					125			
Glu	Val	Thr	Val	Asn	Gly	Leu	Asp	Thr	Val	Arg	Val	Pro	Met	Ser	Val
		130				135					140				
Val	Asn	Phe	Glu	Lys	Pro	Lys	Thr	Lys	Arg	Tyr	Lys	Tyr	Trp	Leu	Ala
145					150					155				160	
Gln	Gln	Ala	Ala	Lys	Ala	Met	Ala	Pro	Thr	Ser	Pro	Gln	Ile		
				165						170					

&lt;210&gt; 3351

&lt;211&gt; 1422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3351

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 1422

&lt;210&gt; 3352

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3352

Met Trp Pro Ser Gln Leu Leu Ile Phe Met Met Leu Leu Ala Pro Ile  
 1 5 10 15  
 Ile His Gly Gly Lys His Ser Glu Arg His Pro Ala Leu Ala Ala Ala

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Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Pro Gly His
      35      40      45
Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala Ala His Arg Gly Gln
      50      55      60
Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
65      70      75      80
Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
      85      90      95
Ser

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&lt;210&gt; 3353

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3353

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420

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&lt;210&gt; 3354

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3354

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Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
      20      25      30
Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
      35      40      45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
      50      55      60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
65      70      75      80
Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
      85      90      95
Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
      100      105

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<210> 3355  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

<400> 3356  
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 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln  
 35 40 45  
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His  
 50 55 60  
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His  
 65 70 75 80  
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu  
 85 90 95  
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr  
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 Arg Ser Phe  
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<210> 3357  
 <211> 2268  
 <212> DNA  
 <213> Homo sapiens

<400> 3357



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&lt;210&gt; 3358

&lt;211&gt; 493

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3358

Gln	Thr	Val	Ala	Val	Tyr	Ser	Glu	Ala	Asp	Arg	Asn	Ser	Met	His	Val
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		20					25					30			
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala	
	35					40					45				
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55				60					
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65				70					75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
			85				90						95		
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
		100					105					110			
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
	115					120					125				
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130				135					140					
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145				150					155					160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
			165				170						175		
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
		180				185						190			
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

195	200	205
His Gln Lys Ile Ile Glu Glu Ala Pro Ala Pro Gly Ile Lys Ser Glu		
210	215	220
Val Arg Lys Lys Leu Gly Glu Ala Ala Val Arg Ala Ala Lys Ala Val		
225	230	235
Asn Tyr Val Gly Ala Gly Thr Val Glu Phe Ile Met Asp Ser Lys His		
245	250	255
Asn Phe Cys Phe Met Glu Met Asn Thr Arg Leu Gln Val Glu His Pro		
260	265	270
Val Thr Glu Met Ile Thr Gly Thr Asp Leu Val Glu Trp Gln Leu Arg		
275	280	285
Ile Ala Ala Gly Glu Lys Ile Pro Leu Ser Gln Glu Glu Ile Thr Leu		
290	295	300
Gln Gly His Ala Phe Glu Ala Arg Ile Tyr Ala Glu Asp Pro Ser Asn		
305	310	315
Asn Phe Met Pro Val Ala Gly Pro Leu Val His Leu Ser Thr Pro Arg		
325	330	335
Ala Asp Pro Ser Thr Arg Ile Glu Thr Gly Val Arg Gln Gly Asp Glu		
340	345	350
Val Ser Val His Tyr Asp Pro Met Ile Ala Lys Leu Val Val Trp Ala		
355	360	365
Ala Asp Arg Gln Ala Ala Leu Thr Lys Leu Arg Tyr Ser Leu Arg Gln		
370	375	380
Tyr Asn Ile Val Gly Leu His Thr Asn Ile Asp Phe Leu Leu Asn Leu		
385	390	395
Ser Gly His Pro Glu Phe Glu Ala Gly Asn Val His Thr Asp Phe Ile		
405	410	415
Pro Gln His His Lys Gln Leu Leu Leu Ser Arg Lys Ala Ala Lys		
420	425	430
Glu Ser Leu Cys Gln Ala Ala Leu Gly Leu Ile Leu Lys Glu Lys Ala		
435	440	445
Met Thr Asp Thr Phe Thr Leu Gln Ala His Asp Gln Phe Ser Pro Phe		
450	455	460
Ser Ser Ser Ser Gly Arg Arg Leu Asn Ile Ser Tyr Thr Arg Asn Met		
465	470	475
Thr Leu Lys Asp Gly Lys Asn Ser Phe Arg Leu Leu Gly		
485	490	

&lt;210&gt; 3359

&lt;211&gt; 652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3359

```

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<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

Met	Glu	Lys	Gln	Cys	Cys	Ser	His	Pro	Val	Ile	Cys	Ser	Leu	Ser	Thr
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			20					25					30		
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
			35					40					45		
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
			50					55					60		
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65						70				75					80
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
						85				90					95
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
						100				105				110	
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
						115							125		
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
						130				135					140
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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&lt;210&gt; 3362

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3362

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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35				40					45			
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
	50					55					60				
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70				75					80	
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85				90					95		
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100				105					110			
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Thr	Val	Ala	Pro	His	Gly	Ile	Pro
		115				120					125				
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
	130					135				140					
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

145                      150                      155                      160  
 Pro Pro Pro Met Leu Gln Ala Cys Ser Val Gln His Leu Pro Val Pro  
                                  165                      170                      175  
 Tyr Ala Ala Phe Pro Pro Leu Ile Ser Ser Asp Pro Phe Leu Ile His  
                                  180                      185                      190  
 Pro Pro His Leu Ser Pro His His Pro Pro His Leu Pro Pro Pro Gly  
                                  195                      200                      205  
 Gln Phe Val Pro Phe Gln Thr Gln Gln Ser Arg Ser Pro Leu Gln Arg  
                                  210                      215                      220  
 Ile Glu Asn Glu Val Glu Leu Leu Gly Glu His Leu Pro Gly Ala His  
 225                      230                      235                      240  
 Pro Gln His Pro His Leu Leu Ile Asn Ile Ser Thr  
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<210> 3363  
 <211> 718  
 <212> DNA  
 <213> Homo sapiens

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 240  
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<210> 3364  
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 <212> PRT  
 <213> Homo sapiens

<400> 3364  
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	20		25		30										
Pro	Gly	Leu	Leu	Met	Glu	Ser	Tyr	Ala	Pro	Ser	Pro	Arg	Leu	Gly	Cys
	35						40					45			
Thr	Phe	Thr	Asp	Cys	Gln	Lys	Phe	Leu	Ile	Leu	Leu	Trp	Gly	Pro	Gly
	50					55					60				
Lys	Glu	Ser	Pro	Thr	Val	Trp	Ser	Cys	Pro	Leu	Asp	Ser	Thr	His	His
65					70					75				80	
Ser	Gly	Ser	Asn	Cys	Thr	Ser	Leu	Gly	Ser	Ser	Ala	Gly	Cys	Ile	Gly
			85						90				95		
Ser	Gly	Leu	Phe	Arg	Cys	Cys	Cys	Gly	Arg	Thr	Asp	Ser	Pro	Arg	Ala
		100						105					110		
Gly	Gly	Arg	Gly	Gly	Arg	Trp	Gly	Ala	Ser	Pro	Val	Gly	Ser	Gly	Asp
	115						120					125			
Thr	Pro	Glu	Leu	Leu	Gly	Arg	Gln	Cys	His	Pro	Lys	Asn	His	Gly	His
	130					135					140				
Asp	Gly	Val	Pro	Asp	His	Ala	Gly	Gln	Pro	Ile	Pro	His	His	Gln	Arg
145					150					155				160	
Ser	Trp	Ala													

&lt;210&gt; 3365

&lt;211&gt; 2389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3365

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2389

&lt;210&gt; 3366



&lt;211&gt; 624

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3366

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      20           25           30
Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
      35           40           45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
      50           55           60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
      65           70           75           80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
      85           90           95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
      100          105          110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
      115          120          125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
      130          135          140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
      145          150          155          160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
      165          170          175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
      180          185          190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
      195          200          205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
      210          215          220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
      225          230          235          240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
      245          250          255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
      260          265          270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
      275          280          285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
      290          295          300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
      305          310          315          320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
      325          330          335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
      340          345          350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
      355          360          365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
      370          375          380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

```

```

385          390          395          400
Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala
          405          410          415
Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg
          420          425          430
Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His
          435          440          445
Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn
          450          455          460
Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile Glu Asn Phe His Val
          465          470          475          480
Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile Tyr Gln Thr His Lys
          485          490          495
Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Val Ile
          500          505          510
Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val
          515          520          525
Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys
          530          535          540
Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser
          545          550          555          560
Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys
          565          570          575
Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser
          580          585          590
Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro Lys Phe Leu Lys Arg
          595          600          605
Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly Lys Pro Ile Leu Phe
          610          615          620

```

<210> 3367  
 <211> 366  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3367
acgcgtgcag gagaggagag gccaggagat agggagggca gtttgtggat tgaaatgacc
60
gagaattacg ccacagaggt gttggaggct ggcatcgtgg catctcagga gcacggaggg
120
tgccttcccc acttcaggcc tcttagtgtc aaggatgtga gaggcaaggg ctgctgggag
180
agtattttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggaggaag
240
gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
300
cctcctgacc cagaccataa ccagcctccg attgtgcttt tgaccctggt tccttcaggc
360
accagg
366

```

<210> 3368  
 <211> 104  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3368

```

Met Thr Glu Asn Tyr Ala Thr Glu Val Leu Glu Ala Gly Ile Val Ala
 1           5           10           15
Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
      20           25           30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
      35           40           45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
      50           55           60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65           70           75           80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
      85           90           95
Thr Leu Phe Pro Ser Gly Thr Arg
      100

```

&lt;210&gt; 3369

&lt;211&gt; 1405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3369

```

ctgtgtccag ggaaaagctt tcagcagcaa agggaagcca tgaaacaaac catagaagaa
60
gataaggagc agaaaaatca ggaaaactgt ggtgcaaaga agaataaaaa gaagaggaaa
120
aagggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgcgt cagaggctca tgaacaaaga aaaggaccgc
300
tttgcattctg cagttcctca tacaaccgg agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatggtg aatttgagaa gaatttgtat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaatatg tcttttaagt cttcgtacac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgaggtga aagaaacatc cattctgtgg catgttggac
840
ttgatctggc aaaaactgcc aataggagga ctgcccgaca ctgcagcaag attgaggata
900

```

agatggaagg cagcagtata agctgtagat ctgttcttag atctcttgaa ttagtgagac  
 960  
 gacagttccc ttaggcagtt tgtgcatggc atcctttatt ctctatacat ggcttttagcg  
 1020  
 gttcttgccct cattttggga ttctaaatgg aagctttcaa cagagcattc cattttgtcc  
 1080  
 tgttaaaacc ttttgtttcc acctaaaccc tttctgctta gttgtatctc tgtgaaaaac  
 1140  
 ttgtatacac aagcgtccat gtctcacaca aatattgatg tgattattct taagtgttaa  
 1200  
 atcattaaca cttaaagac ttcatggga atattgagca gagggactgt gcttctatgc  
 1260  
 actgggcaag gcagtatttg cttaggaaac taatttagtc atcagagata ctttctctaaa  
 1320  
 aaggaaaaat aaaaaacaaa atggtgccac tttgggttga agctactttg ttaggcttga  
 1380  
 attcatttat atgtcttttg attct  
 1405

<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

Leu	Val	Pro	Gly	Lys	Ser	Phe	Gln	Gln	Gln	Arg	Glu	Ala	Met	Lys	Gln
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Thr	Ile	Glu	Glu	Asp	Lys	Glu	Gln	Lys	Asn	Gln	Glu	Asn	Cys	Gly	Ala
		20						25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser
	50				55					60					
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65				70					75					80	
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
		85						90					95		
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
		100						105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
	115					120						125			
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
	130					135					140				
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val
145			150						155					160	
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
		165						170					175		
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
	180							185					190		
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
	195					200						205			
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
	210					215					220				
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser

```

225          230          235          240
Asp Leu Asp Lys Ala Tyr Gln Glu Leu Leu Arg Leu Ile Asn Lys Leu
          245          250          255
Asp Thr Glu Pro Gln Trp Val Pro Ser Thr Trp Leu Arg
          260          265

```

<210> 3371  
 <211> 790  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3371
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gacagaccag agactccagt caccctcgcc atctgtggaa tcatattctg gctgatcttt
120
ggtttcaaaa gtccgggtggc ctggggctgt atgggtccac cccctggggg gggtgaggaa
180
gttgctgtcg tctgaggtag tgccgtacgt gtagtctctg tccccgcttt tgccctggcc
240
aaagaagcac caagggagca tctggaccac caggctgcac accaaccctt cccagaccg
300
cgattccgac aagagacggg gcacccttca ttgcaaagag atttccccag atcctttctc
360
cttgatctac caaactttcc agatctttcc aaagctgata tcaatgggca gaatccaaat
420
atccaggtca ccatagaggt ggtcgacggt cctgactctg aagcagataa agatcagcat
480
ccggagaata agcccagctg gtcagtccca tcccccgact ggcgggcctg gtggcagagg
540
tccctgtcct tggccagggc aaacagcggg gaccaggact acaagtacga cagtacctca
600
gacgacagca acttctctca cccccccagg ggggtgggacc atacagcccc aggccaccgg
660
acttttgaaa ccaaagatca gccagaatat gattccacag atggcgaggg tgactggagt
720
ctctggtctg tctgcagcgt cacctgcggg aacggcaacc agaaacggac ccggtcttgt
780
ggctacgcgt
790

```

<210> 3372  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3372
Gly Thr Ala Val Arg Val Val Leu Val Pro Ala Phe Ala Leu Ala Lys
1          5          10          15
Glu Ala Pro Arg Glu His Leu Asp His Gln Ala Ala His Gln Pro Phe
20          25          30
Pro Arg Pro Arg Phe Arg Gln Glu Thr Gly His Pro Ser Leu Gln Arg
35          40          45
Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp Leu

```

50                      55                      60  
 Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile  
 65                      70                      75                      80  
 Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro  
                     85                      90                      95  
 Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp  
                     100                      105                      110  
 Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp  
                     115                      120                      125  
 Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro  
                     130                      135                      140  
 Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys  
 145                      150                      155                      160  
 Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu  
                     165                      170                      175  
 Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr  
                     180                      185                      190  
 Arg Ser Cys Gly Tyr Ala  
                     195

&lt;210&gt; 3373

&lt;211&gt; 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3373

tgtacatgtt ttctctgggc tgacaggggc cctgcccctg gggcactgag ccctccctgt  
 60  
 gggctcctcga acagaagcca gggctctgtgc ggcacccacc agctgctggg ccatggcgga  
 120  
 gtgttctggg gggggccagc gcctgaccgg tgcgggcggc ctccaggagag gagagcttgc  
 180  
 tcagtgcgtc acgtagtcag ggctcaggct gggggccggc tccagagcct ggtcacattc  
 240  
 ccaagcttca ttctcttcac ctgtgaattg caggcttccc tgggtgtgccc tgcacatgag  
 300  
 ggaagacaca cctgaagcac tgggtccctc catggccttg ggccgcagga accgtgggcg  
 360  
 cactagcttg ggaaggacat gtcggaggcc ggcgcctgtg cgggcagaag ctgtgtcctc  
 420  
 cagcccttcc accaccagca tgttctcatt tccaggtttc tctgtttaaa aaacaaaagt  
 480  
 agcgcacatcg tggctcttcac gacgtacacc cagaagcacc cgtccatcga ggacgggcct  
 540  
 ccgtttgtgg agccgctgct taacttcac tggttcctgc tgctggctgt ggacgggtgc  
 600  
 gtcttgggat cctgcagggg gagggggctg tgaatgtgcg ggttgtgtgt agacgtgggtg  
 660  
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 720  
 atgcat  
 726

&lt;210&gt; 3374

<211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 3374  
 Met Ser Glu Ala Gly Ala Cys Ala Gly Arg Ser Cys Val Leu Gln Pro  
 1 5 10 15  
 Phe His His Gln His Val Leu Ile Ser Arg Phe Leu Cys Leu Lys Asn  
 20 25 30  
 Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro  
 35 40 45  
 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile  
 50 55 60  
 Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg  
 65 70 75 80  
 Gly Arg Gly Leu

<210> 3375  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 3375  
 acgcgtgcat acgtgatctc atgtttgcac acatgtgtcc atgcagatgc atgctctcac  
 60  
 gcacatgtgc ccacacactc agcactcaca ccccgctctg caggctcagc cccactcctg  
 120  
 agccacctgc ctgggctttg ggggcccagc cggcatgggg agccccaggc tccagctggc  
 180  
 ctgccttggc tctgaaatct aggccaggat gcagagcccg cagtgcggcc agtggagccc  
 240  
 ctggtactgt gcgcagcccc cacctggcag ccccttttcc tgtcaaagcc cctcccagcg  
 300  
 tcctctcccc accaggcaag ctaccgcgtt gaggttagg acgttgcgcc ctctgtgtc  
 360  
 cttgccagc atccccggcc tgcattctac cag  
 393

<210> 3376  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 3376  
 Met Phe Ala His Met Cys Pro Cys Arg Cys Met Leu Ser Arg Thr Cys  
 1 5 10 15  
 Ala His Thr Leu Ser Thr His Thr Pro Ser Cys Arg Leu Ser Pro Thr  
 20 25 30  
 Pro Glu Pro Pro Ala Trp Ala Leu Gly Ala Gln Pro Ala Trp Gly Ala  
 35 40 45  
 Pro Gly Ser Ser Trp Pro Arg Leu Ala Leu Lys Ser Arg Pro Gly Cys  
 50 55 60  
 Arg Ala Arg Ser Ala Ala Ser Gly Ala Pro Gly Thr Val Arg Ser Pro

```

65              70              75              80
His Leu Ala Ala Pro Phe Pro Val Lys Ala Pro Pro Ser Val Leu Ser
              85              90              95
Pro Pro Gly Lys Leu Pro Ala
              100

```

```
<210> 3377
<211> 5235
<212> DNA
<213> Homo sapiens
```

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<400> 3377
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aggacatggc tgatcagttt tctgacagaa gtgggtaaat ttccgcggtg gtaaatttcc
120
tgacaggaaa ttctggggaa ctaaaaaggc tggaagaaca tgaagatgga gcagtcataa
180
accaccctact caaggacct ctccttcacg accatccaca cgagactcag attgtctgaa
240
ttgagctatc gcaacttaat gctaaaagct ccttaaagct acagatttat gacatagtct
300
cttccaaaat attacatcat aaatcattga gaagattaaa aaaaaacact tgaagaaatt
360
gtagttttta acatctctgc atatattttg gatagctact aggttacttt aactgtcatt
420
aaggagcaca gacttactga agctttactg gacagaatcc tgggaaatcg atatcattat
480
aaggttatat ttcccagtta gcgggtgaag ggctggagac cttattgcag tcatggcttt
540
cacaaattac agcagtctga atcgagctca gctaaccctt gaatatctgc acacaaattc
600
gtaagtatcc tctaggtgcc actgaggtaa ccagtaactc gttccttgat attatatgga
660
aatcgtttcc ccagaaaatt ttgctttttc actttttgag atgtatccca ctggagtga
720
atgtgtcact ggatatcttg agctctgtat tgaagaactg agatcagtga aatacttggt
780
gctaataccag aagaatctga tttttgttta ttggatcaaa attttctaaa tgcaaaactt
840
agttatttga agtcaatatg ttgagttggt tcattcaagt gtttatagga atccaacaaa
900
tactgtctta ttggatcgcc aaatgttgga ctatttttagt atcaaccgtt tcccctctgt
960
agtgacaacg tcctaaacag ttaggtttat aacaagtgtt tactttctaa caagaaaaca
1020
gaagacattt aaatgacaac tttcaagaag aaaattttta ttttttcaga agttggcatt
1080
atcttctctg cagattgctc acatccaata ttatttgtat atgctaaaca ggaaacggca
1140
acttgtttat atctctattt agatagtctt tccccaaaat ttccacagaa acatacagt
1200
ttcatgggtc ttgagttcat gaaggagtaa tctaactcact ccaacatggt ctggaatggt
1260

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tcagggtttaa tccatatgcc cactctcttg gaggtgtcc agtagcgtca aaactttagt  
1320  
gttttaatac attcacctgt tacttttgag atgaagttca cctttcttgg atcacatgca  
1380  
aaggatgttt aggtctgtga agaaaagaat ttctaggccg ggtgctgtgg ctcacgcctg  
1440  
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1920  
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1980  
agcggaacat tggatgatcat cttcaatctc aaactcatgg ataatggaga gccagaacta  
2040  
gacataatct caaatccaag agatatccag atggcagaga cgtccccaga gggcacgaag  
2100  
ccagagcggc gctcgttccg tgcctatgcc gctgtgctct atattgatcc ccgatgagg  
2160  
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2220  
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2280  
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2340  
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gccaagcagc gagcacttaa agaacctaa gaactgaatt ttgtttttgg tgtcaacatt  
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2820  
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2880

accaccatcc agtgcgattt gtgtctgaaa tggagaaccc tccccttcca gctgagttct  
2940  
gtggaaaaag attaccctga cacctgggtt tgctccatga accctgatcc tgaacaggac  
3000  
cgggtgtgagg cttctgaaca aaagcagaag gttcccctgg gaacattcag aaaggacatg  
3060  
aagacgcagg aagagaagca gaaacaactg acagagaaaa ttcgccagca gcaggagaag  
3120  
ctggaggccc ttcagaaaac cacaccatc cgctcccaag cagacctgaa gaaattgccc  
3180  
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3240  
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3300  
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3360  
gctttggcag cccgggagga ggccagcaca tctaggctgc tccagccacc tgaggacccc  
3420  
cgaaagcctg ccaacactct cgtcaagact gcacccgac ctgccccctt ggtgcagcaa  
3480  
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3540  
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3600  
agtcggaagc ggagtgtcgc agtttctgat gaggaagaag ttgaggagga agctgagagg  
3660  
aggaaggaga ggtgcaagcg gggcagattt gttgtgaagg aggaaaagaa ggactcgaat  
3720  
gagctctcag acagtgtctg gggagaggac tcggctgacc tcaagagagc tcagaaagat  
3780  
aaaagggtgc acgtggaggt gcgtgtgaac agggagtggg acacggggcg tgtcacagcc  
3840  
gtggaggtgg gcaagcatgt ggtgcggtgg aagggtgaagt ttgactacgt gccacagac  
3900  
acgacaccaa gagaccgctg ggtggagaaa ggcagtgagg atgtgcggct gatgaaaccc  
3960  
ccttctccgg aacatcagag ccttgataca caacaggagg gcggggagga ggaggtggg  
4020  
cctgtggccc agcaggccat agctgtcgca gagccctcca cttccgaatg cctccgcatt  
4080  
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4140  
ctccggaatt gtttacggtc cttcctgcct ccaagtttcc ccatctcaa gaagcagctg  
4200  
agtgtctatga attcagatga gctaatatct tttcctctga aggagtactt caagcaatat  
4260  
gaagtagggc tccaaaacct gtgcaattcc taccagagcc gtgctgactc ccgggccaag  
4320  
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4380  
cagaagctga ggaccaacat cgtggcactc ctgcaaaagg tgcaggagga catagacatc  
4440  
aacacagatg atgagctgga cgcctacatt gaggacctca tcaccaaggg ggactgaagg  
4500

caggagagag agcagctccc ctgccacact gccctcaac cctgtagctg cagggggagg  
 4560  
 ggacttcatt catgggttgg tggcgcacc ttggttgac ttacacggga catttggtt  
 4620  
 tttggaggaa aagataccct gattctttga atcttcctta agtttataaa tatttatttt  
 4680  
 ttaaaagaag atgctgtgcc tgtgagacca tacttttttt tttttttttt tttttttttt  
 4740  
 ttttttttgg tgactgcaaa ggacagagaa cctttccact ttggccatac tgggttgcta  
 4800  
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 4860  
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 4920  
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 4980  
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 5040  
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 5100  
 ctcatctact actcaagttc tttctgaagg agggatttct tcagttaacc atggacagtg  
 5160  
 aggtttctca ccacagtaac ttgggtccag gttgaggggg agacagatct gtggtaaate  
 5220  
 tctgacttgg gcagc  
 5235

&lt;210&gt; 3378

&lt;211&gt; 970

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3378

Met	Leu	Cys	Phe	Leu	Asp	Asp	Gly	Ala	Gly	Met	Asp	Pro	Ser	Asp	Ala
1				5					10					15	
Ala	Ser	Val	Ile	Gln	Phe	Gly	Lys	Ser	Ala	Lys	Arg	Thr	Pro	Glu	Ser
			20					25					30		
Thr	Gln	Ile	Gly	Gln	Tyr	Gly	Asn	Gly	Leu	Lys	Ser	Gly	Ser	Met	Arg
		35					40					45			
Ile	Gly	Lys	Asp	Phe	Ile	Leu	Phe	Thr	Lys	Lys	Glu	Asp	Thr	Met	Thr
	50					55					60				
Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Gly	Ile	Asp	Glu	
65				70					75				80		
Val	Ile	Val	Pro	Leu	Pro	Thr	Trp	Asn	Ala	Arg	Thr	Arg	Glu	Pro	Val
			85					90					95		
Thr	Asp	Asn	Val	Glu	Lys	Phe	Ala	Ile	Glu	Thr	Glu	Leu	Ile	Tyr	Lys
			100					105				110			
Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
		115				120					125				
Ile	Pro	Gly	Asp	Ser	Gly	Thr	Leu	Val	Ile	Ile	Phe	Asn	Leu	Lys	Leu
	130					135					140				
Met	Asp	Asn	Gly	Glu	Pro	Glu	Leu	Asp	Ile	Ile	Ser	Asn	Pro	Arg	Asp
145				150					155					160	
Ile	Gln	Met	Ala	Glu	Thr	Ser	Pro	Glu	Gly	Thr	Lys	Pro	Glu	Arg	Arg

2558

595	600	605
Pro Glu Ala Pro Arg Lys	Pro Ala Asn Thr Leu Val	Lys Thr Ala Ser
610	615	620
Arg Pro Ala Pro Leu Val Gln	Gln Leu Ser Pro Ser Leu Leu Pro Asn	
625	630	635
Ser Lys Ser Pro Arg Glu Val	Pro Ser Pro Lys Val Ile Lys Thr Pro	640
645	650	655
Val Val Lys Lys Thr Glu Ser	Pro Ile Lys Leu Ser Pro Ala Thr Pro	
660	665	670
Ser Arg Lys Arg Ser Val Ala	Val Ser Asp Glu Glu Glu Val Glu Glu	
675	680	685
Glu Ala Glu Arg Arg Lys Glu	Arg Cys Lys Arg Gly Arg Phe Val Val	
690	695	700
Lys Glu Glu Lys Lys Asp Ser	Asn Glu Leu Ser Asp Ser Ala Gly Gly	
705	710	715
Glu Asp Ser Ala Asp Leu Lys	Arg Ala Gln Lys Asp Lys Gly Leu His	720
725	730	735
Val Glu Val Arg Val Asn Arg	Glu Trp Tyr Thr Gly Arg Val Thr Ala	
740	745	750
Val Glu Val Gly Lys His Val	Val Arg Trp Lys Val Lys Phe Asp Tyr	
755	760	765
Val Pro Thr Asp Thr Thr Pro	Arg Asp Arg Trp Val Glu Lys Gly Ser	
770	775	780
Glu Asp Val Arg Leu Met Lys	Pro Pro Ser Pro Glu His Gln Ser Leu	
785	790	795
Asp Thr Gln Gln Glu Gly Gly	Glu Glu Glu Val Gly Pro Val Ala Gln	800
805	810	815
Gln Ala Ile Ala Val Ala Glu	Pro Ser Thr Ser Glu Cys Leu Arg Ile	
820	825	830
Glu Pro Asp Thr Thr Ala Leu	Ser Thr Asn His Glu Thr Ile Asp Leu	
835	840	845
Leu Val Gln Ile Leu Arg Asn	Cys Leu Arg Tyr Phe Leu Pro Pro Ser	
850	855	860
Phe Pro Ile Ser Lys Lys Gln	Leu Ser Ala Met Asn Ser Asp Glu Leu	
865	870	875
Ile Ser Phe Pro Leu Lys Glu	Tyr Phe Lys Gln Tyr Glu Val Gly Leu	
885	890	895
Gln Asn Leu Cys Asn Ser Tyr	Gln Ser Arg Ala Asp Ser Arg Ala Lys	
900	905	910
Ala Ser Glu Glu Ser Leu Arg	Thr Ser Glu Arg Lys Leu Arg Glu Thr	
915	920	925
Glu Glu Lys Leu Gln Lys Leu	Arg Thr Asn Ile Val Ala Leu Leu Gln	
930	935	940
Lys Val Gln Glu Asp Ile Asp	Ile Asn Thr Asp Asp Glu Leu Asp Ala	
945	950	955
Tyr Ile Glu Asp Leu Ile Thr	Lys Gly Asp	960
965	970	

&lt;210&gt; 3379

&lt;211&gt; 898

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3379

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 60  
 gtgggctcag ctaccttgac ggtgatggc atcgacacca atggcaatcg cccaccatc  
 120  
 ccccaaccct gggagctccg agtgtcagaa gatgcgttat tgggctcaga gattgcacag  
 180  
 gtaacaggga atgatgtgga ctcaggaccc gtgctgtggt atgtgctaag cccatctggg  
 240  
 ccccaggatc ccttcagtgt tggccgctat ggaggccgtg tctccctcac ggggcccctg  
 300  
 gactttgagc agtgtgaccg ctaccagctg cagctgctgg cacatgatgg gcctcatgag  
 360  
 ggccgtgcan acctcacagt gcttgtggag gatgtcaatg acaatgcacc tgccttctca  
 420  
 cagagcctct accaggtaat gctgcttgag cacacacccc caggcagtgc cattctctcc  
 480  
 gtctctgcca ctgacggga ctcagggtgcc aacggtcaca tttcctacca cctggcttcc  
 540  
 cctgccgatg gcttcagtgt tgacccaac aatgggaccc tgttcacaat agtgggaaca  
 600  
 ttggccttgg gccatgacgg gtcaggagca gtggatgtgg tgctggaagc acgagaccac  
 660  
 ggggctccag tccgggcagc acgagccaca gtgaacgtgc agctgcggga ccagaacgac  
 720  
 caccgcccga gcttcacatt gttccactac cgtgtggctg tgactgaaga cctgccccct  
 780  
 ggctccactc tgctaaccct ggaggctaca gatgctgatg gaagccgag ccatgccgct  
 840  
 gtggattaca gcatcatcag tggcaactgg ggccgagtct tccagctgga acccaggc  
 898

&lt;210&gt; 3380

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3380

Xaa	Ile	Trp	Ala	Glu	Thr	Arg	Leu	Val	Leu	Met	Ala	Thr	Asp	Arg	Gly
1				5					10					15	
Ser	Pro	Ala	Leu	Val	Gly	Ser	Ala	Thr	Leu	Thr	Val	Met	Val	Ile	Asp
			20					25					30		
Thr	Asn	Gly	Asn	Arg	Pro	Thr	Ile	Pro	Gln	Pro	Trp	Glu	Leu	Arg	Val
		35					40					45			
Ser	Glu	Asp	Ala	Leu	Leu	Gly	Ser	Glu	Ile	Ala	Gln	Val	Thr	Gly	Asn
		50				55					60				
Asp	Val	Asp	Ser	Gly	Pro	Val	Leu	Trp	Tyr	Val	Leu	Ser	Pro	Ser	Gly
65					70					75				80	
Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
				85					90					95	
Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
			100					105					110		
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
		115					120					125			
Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

130 135 140  
 Gln Val Met Leu Leu Glu His Thr Pro Pro Gly Ser Ala Ile Leu Ser  
 145 150 155 160  
 Val Ser Ala Thr Asp Arg Asp Ser Gly Ala Asn Gly His Ile Ser Tyr  
 165 170 175  
 His Leu Ala Ser Pro Ala Asp Gly Phe Ser Val Asp Pro Asn Asn Gly  
 180 185 190  
 Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser  
 195 200 205  
 Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val  
 210 215 220  
 Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp  
 225 230 235 240  
 His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu  
 245 250 255  
 Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala  
 260 265 270  
 Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly  
 275 280 285  
 Asn Trp Gly Arg Val Phe Gln Leu Glu Pro Arg  
 290 295

&lt;210&gt; 3381

&lt;211&gt; 1379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3381

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 gagccgctgg aaggacaga acagacacta gatgcggagg aggagcagga ggaatccgaa  
 120  
 gaagcggcct gtggcagcaa gaaacgggta gtgccaggta ttgtgtacct gggccatata  
 180  
 ccgcccgcgt tccggccccct gcacgtccgc aacctttctca gcgcctatgg cgaggtcgga  
 240  
 cgcgtcttct ttcaggctga ggaccggttc gtgagacgca agaagaaggc agcagcagct  
 300  
 gccggaggga aaaagcggtc ctacaccaag gactacaccg agggatgggt ggagtccgt  
 360  
 gacaagcgca tagccaagcg cgtggcggcc agtctacaca acacgcctat gggtgcccgc  
 420  
 aggcgcagcc ccttccgta tgatctttgg aacctcaagt acttgaccg tttcacctgg  
 480  
 tccacactca gcgagcacct cgcctttgag cgccagggtc gcaggcagcg cttgagagcg  
 540  
 gaggttgctc aagccaagcg tgagaccgac ttctatcttc aaagtgtgga acggggacaa  
 600  
 cgctttcttg cggccgatgg ggaccctgct cgcccagatg gctcctggac atttgcccag  
 660  
 cgtcctactg agcaggaact gagggcccgt aaagcagcac ggccaggggg acgtgaacgg  
 720  
 gctcgcctgg caactgcccga ggacaaggcc cgctccaaca aagggtcctt ggccaggatc  
 780

ttggagccc cgccaccctc agagagcatg gagggacctt ccctgtcag ggactcctga  
 840  
 gggcctgggt ggccccttcc atttcttggc cctgctctgc ttctgtcta cctcatacta  
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 960  
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 1020  
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 1080  
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 1200  
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 1260  
 agttaatggg gtggactggg ttgggaagaa atacatttcc taatgtattt atagaaaata  
 1320  
 aaaatatttt tatgtgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1379

&lt;210&gt; 3382

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3382

Xaa	Pro	Leu	Val	Ser	Val	Asn	Met	Glu	Ala	Glu	Glu	Ser	Glu	Lys	Ala
1				5					10					15	
Ala	Thr	Glu	Gln	Glu	Pro	Leu	Glu	Gly	Thr	Glu	Gln	Thr	Leu	Asp	Ala
		20						25					30		
Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
		35					40					45			
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
		50				55					60				
Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
65					70					75				80	
Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
				85					90					95	
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
			100					105					110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
		115					120					125			
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
		130				135					140				
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
145				150						155				160	
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
			165						170					175	
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
			180					185					190		
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
		195				200						205			
Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu



```

      210              215              220
Gln Glu Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg
225              230              235              240
Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu
      245              250              255
Leu Ala Arg Ile Phe Gly Ala Pro Pro Pro Ser Glu Ser Met Glu Gly
      260              265              270
Pro Ser Leu Val Arg Asp Ser
      275

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<210> 3383  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

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<400> 3383
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60
gtgttgcttg cacacaaatt ttgtagctgg agtgagtatt gttgttattt gtgttatagg
120
aaatgctcac ttcttaacct cttttgtcct ggagcataga attactgcaa atgctcacc
180
ctgggagctg tcctgcccc gatctccac acaaacactc cagcatgaaa gagcgagact
240
caatctcaaa aaaaaaaagt ttcgggcacc tgaacaggaa ctgggtttcca tcatcaactc
300
agaaagccc
309

```

<210> 3384  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3384
Met Leu Ala His His Gly Ser Arg Glu Lys Cys Gln Cys Cys Leu His
1              5              10              15
Thr Asn Phe Val Ala Gly Val Ser Ile Val Val Ile Cys Val Ile Gly
      20              25              30
Asn Ala His Phe Leu Thr Ser Phe Val Leu Glu His Arg Ile Thr Ala
      35              40              45
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
      50              55              60
Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Lys Phe Arg
65              70              75              80
Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
      85              90

```

<210> 3385  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

<400> 3385

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 60  
 gtaggggtga gccggcttgg ccagagggag gagggcttat gctgaggtct actgatggta  
 120  
 gtgaaaacag tgacggtgcg ggggtgggga gcactgcggt ccacttcttc agccccccac  
 180  
 tatcctggaa gcttcagggg gggcccagag cagcctccag cttcagcgac caccctgtt  
 240  
 cctcttgcca ggttctttgt gaacttcccc tcggccaagc agtacttcag ccagttcaag  
 300  
 cacatggagg atcccctgga gatggagcgg agccccagc tgcggaagca cgctgcccga  
 360  
 gtcattgggg ccctcaacac tgcctgggag aacctgcatg accccgacaa ggtgtctctt  
 420  
 gtgctcggcc ttgtggggaa agcccacgcc ctcaagcaca aggtggaacc ggtgtacttc  
 480  
 aagatcctct ctgggggtcat tctggaggtg gtcgccgagg aatttgccag tgacttccca  
 540  
 cctgagacgc agagagcctg ggccaagctg cgtggcctca tctacagcca cgtgaccgct  
 600  
 gcctacaagg aagtgggctg ggtgcagcag gtccccaacg ccaccacccc accggccaca  
 660  
 ctgcctctt cggggccgta ggaccctcc ctccacccc ctcctgggca gcacctcgag  
 720

&lt;210&gt; 3386

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3386

Met	Val	Val	Lys	Thr	Val	Thr	Val	Arg	Gly	Trp	Gly	Ala	Leu	Arg	Ser
1				5					10					15	
Thr	Ser	Ser	Ala	Pro	His	Tyr	Pro	Gly	Ser	Phe	Arg	Val	Gly	Pro	Arg
			20					25					30		
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
		35				40						45			
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met
	50				55					60					
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65					70					75				80	
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
			85					90					95		
Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
		100					105						110		
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
	115					120						125			
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
	130					135				140					
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145					150					155				160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
			165					170						175	
Thr	Thr	Pro	Pro	Ala	Thr	Leu	Pro	Ser	Ser	Gly	Pro				

180

185

&lt;210&gt; 3387

&lt;211&gt; 3299

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3387

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60  
atgaggtcgg tgatggcgtt ggtaaaggct tcctgggggt ttgccccgcc ggagtaatcc  
120  
ggaagaggcc tcttattagg gctctggtgg cggcggcggc ggacccttgg ggtctggacg  
180  
caacggcggc gggagcatga acgcccctcc agccttcgag tcgttcttgc tcttcgaggg  
240  
cgagaagaag taagtgcgc cggctgcggc gggccgagga tcaccattaa caaggacacc  
300  
aaggtaccca atgcctgttt attcaccatc aacaaagaag accacacact gggaaacatc  
360  
attaaatcac aactcctaaa agaccgcga gtgctatttg ctggctacaa agtccccac  
420  
cccttggagc acaagatcat catccgagtg cagaccacgc cggactacag cccccaggaa  
480  
gcctttacca acgcatcac cgacctcatc agtgagctgt ccctgctgga ggagcgcttt  
540  
cgggtggcca taaaagacaa gcaggaagga attgagtagg ggccagaggg ggctctgctc  
600  
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660  
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720  
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780  
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900  
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ccggagagaa gtgtgcaaac ccatgagctc ccaagagtct ctgctctaga agcctcaact  
1020  
cctgggcctg cctgtcagtc aaagcaggaa cacttcttcc tgcataactc gaaacacctt  
1080  
tccacaggct tcttgtccac agtagagttt aataaaaata ttcactgaaa gacccccccc  
1140  
acccccatcg gcccaaagct gaataagtta gttagctgtg tccttggtcc tttgcgatgg  
1200  
tgtgaggcta catctcccc cagatggcta cgatgttga gtcctcagg gcggtgaggt  
1260  
aggtgaagga ggcattggcc accactgtgt tcaccatggt cttggtcacc acctggccaa  
1320  
gggcccaggg ctggggccac ttcaggatct gtgtgggggc ctgcagggct gccggcagca  
1380

ggggtggctg cttcaggatg ttgctgacgt cgtagagcca cacgttgccc tcctcatccc  
1440  
cacagagcac aatcccccta tcagggcagg cgctgagcga gaagtagggc aactcgggtg  
1500  
acgaccattg cagccgcgcc aggaccacca ctgccactgt ggactggctg ccccgccccc  
1560  
cccacgtctg cctccagctc cacaggcaga tgggtgcccag gccgctcccc ttggaggcca  
1620  
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1680  
cagagaagac gaattccact tcacacaccc tcctcttttg gggctgggtc agccgcacgt  
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1800  
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1860  
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 3180  
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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

Ser	Gly	Arg	Gly	Leu	Leu	Leu	Gly	Leu	Trp	Trp	Arg	Arg	Arg	Arg	Thr
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Leu	Gly	Val	Trp	Thr	Gln	Arg	Arg	Arg	Glu	His	Glu	Arg	Pro	Ser	Ser
			20					25					30		
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp	Ala
		35				40						45			
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val	Pro
	50					55					60				
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly	Asn
65					70					75				80	
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala	Gly
				85					90					95	
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val	Gln
			100					105					110		
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile	Thr
		115					120					125			
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val	Ala
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Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu							
145					150										

<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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 120  
 gacgggcctc cgtttgtgga gccgctgctt aacttcattt ggttcctgct gctggctgtg  
 180  
 gacggggaac cttctgacca gcctcatggg ctccctcagag caggaggatg gggaggagag  
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cggtcgac  
308

<210> 3390  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 3390  
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20 25 30  
Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro  
35 40 45  
Leu Leu Asn Phe Ile Trp Phe Leu Leu Ala Val Asp Gly Glu Pro  
50 55 60  
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu  
65 70 75 80  
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His  
85 90 95  
Val Glu Thr Pro Arg Ser  
100

<210> 3391  
<211> 1295  
<212> DNA  
<213> Homo sapiens

<400> 3391  
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120  
tttgagact tagaagatgg ctttaatttc caaggaacca ggcggcgata ctacagacat  
180  
agtcttcttc acttacaggg tgccattgaa gactggaata atgaaagcag catgccctgt  
240  
tgtgtccttc agcttggaga tatcatcgat ggatataatg cacagtataa tgcattccaaa  
300  
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360  
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420  
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480  
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540  
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 780  
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 840  
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 960  
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 1080  
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 1140  
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 1200  
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 1295

<210> 3392

<211> 355

<212> PRT

<213> Homo sapiens

<400> 3392

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Lys	Pro	Asn	Pro	Glu	Ala	Leu	Ser	Asp	Ser	Ser	Glu	Arg	Leu	Phe	Ser
			20					25					30		
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe
	35					40					45				
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His	
	50				55					60					
Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys
65				70					75					80	
Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr
			85						90					95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg
			100					105					110		
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn
	115						120					125			
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu
	130				135						140				
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr
145				150						155				160	
Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu
			165						170				175		
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys
			180					185				190			
Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu
	195						200					205			
Leu	Asn	Ser	Pro	Gln	Gly	Leu	Ser	Glu	Pro	Gln	Phe	Val	Gln	Phe	Asn

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<210> 3393
<211> 510
<212> DNA
<213> Homo sapiens
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120
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180
cagggtgtgg gcacaggcag ttcctcactg tgggaatctga tgggcaatng catgggtgatg
240
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300
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360
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420
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510

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<210> 3394
<211> 170
<212> PRT
<213> Homo sapiens
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<400> 3394
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  1             5             10             15
Cys Arg Leu Gly Met Gly Pro Gly Xaa Val Thr Pro Ser Ser Phe Val

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<400> 3395
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120
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180
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240
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300
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360
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420
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480
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<210> 3396  
 <211> 205  
 <212> PRT  
 <213> Homo sapiens

<400> 3396  
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 35 40 45  
 Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser  
 50 55 60  
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser  
 65 70 75 80  
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys  
 85 90 95  
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn  
 100 105 110  
 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser  
 115 120 125  
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg  
 130 135 140  
 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr  
 145 150 155 160  
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg  
 165 170 175  
 Val Pro Ser Tyr Ser Gln Gly Ala Arg Pro Lys Glu Asn Ser Met Ser  
 180 185 190  
 Thr Leu Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu  
 195 200 205

<210> 3397  
 <211> 492  
 <212> DNA  
 <213> Homo sapiens

<400> 3397  
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 360  
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 420

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<210> 3398  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 3398  
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 20 25 30  
 Thr Leu Cys Ser Val Pro Ser Leu Glu Gln Gln Gln Pro Gly Xaa Ala  
 35 40 45  
 Ala Ser Ala Ile Pro Ser Trp Leu Leu Asn Asp Pro Gly Val Glu Xaa  
 50 55 60  
 Glu Val Met Gly Asp Ala Val Leu Glu Ala Ser His Asn Val Gln Gly  
 65 70 75 80  
 Cys Gly Cys Ser Trp Val Ser His Ser Gly Arg Gly Val Gly Pro Glu  
 85 90 95  
 Ala Glu Gly Ala Gly Ser Pro Gln Ser Leu Gly His Gly Ser Gly Gly  
 100 105 110  
 Trp Ala Ala Arg Arg Cys His Cys Leu Ser Val Ala Gly Val Ala Ala  
 115 120 125  
 Ala Ser Gly Cys Pro Arg Thr Glu Glu Ala Ala Trp Gly Glu Ile Leu  
 130 135 140  
 Arg Glu Gly Leu Ser Ser Pro Cys Ser Cys Ser Pro Gly Pro Pro Gly  
 145 150 155 160  
 Lys Leu Gly

<210> 3399  
 <211> 5784  
 <212> DNA  
 <213> Homo sapiens

<400> 3399  
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 240  
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 300  
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 360  
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 420

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<210> 3400

<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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		20					25						30		
Cys	Asp	Val	Leu	Leu	Ile	Val	Gly	Asp	Gln	Lys	Phe	Arg	Ala	His	Lys
		35				40						45			
Asn	Val	Leu	Ala	Ala	Ser	Ser	Glu	Tyr	Phe	Gln	Ser	Leu	Phe	Thr	Asn
		50				55					60				
Lys	Glu	Asn	Glu	Ser	Gln	Thr	Val	Phe	Gln	Leu	Asp	Phe	Cys	Glu	Pro
65					70					75				80	
Asp	Ala	Phe	Asp	Asn	Val	Leu	Asn	Tyr	Ile	Tyr	Ser	Ser	Ser	Leu	Phe
				85					90					95	
Val	Glu	Lys	Ser	Ser	Leu	Ala	Ala	Val	Gln	Glu	Leu	Gly	Tyr	Ser	Leu
			100					105					110		
Gly	Ile	Ser	Phe	Leu	Thr	Asn	Ile	Val	Ser	Lys	Thr	Pro	Gln	Ala	Pro
		115				120						125			
Phe	Pro	Thr	Cys	Pro	Asn	Arg	Lys	Lys	Val	Phe	Val	Glu	Asp	Asp	Glu
		130				135					140				
Asn	Ser	Ser	Gln	Lys	Arg	Ser	Val	Ile	Val	Cys	Gln	Ser	Arg	Asn	Glu
145				150						155				160	
Ala	Gln	Gly	Lys	Thr	Val	Ser	Gln	Asn	Gln	Pro	Asp	Val	Ser	His	Thr
				165					170					175	
Ser	Arg	Pro	Ser	Pro	Ser	Ile	Ala	Val	Lys	Ala	Asn	Thr	Asn	Lys	Pro
			180					185					190		
His	Val	Pro	Lys	Pro	Ile	Glu	Pro	Leu	His	Asn	Leu	Ser	Leu	Thr	Glu
		195					200					205			
Lys	Ser	Trp	Pro	Lys	Asp	Ser	Ser	Val	Val	Tyr	Ala	Lys	Ser	Leu	Glu
		210				215					220				
His	Ser	Gly	Ser	Leu	Asp	Asp	Pro	Asn	Arg	Ile	Ser	Leu	Val	Lys	Arg

2578



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 Tyr Ile Cys Thr Tyr Cys Gly Lys Ala Tyr Arg Phe Leu Ser Gln Phe  
 675 680 685  
 Lys Gln His Ile Lys Met His Pro Gly Glu Lys Pro Leu Gly Val Asn  
 690 695 700  
 Lys Val Ala Lys Pro Lys Glu His Ala Pro Leu Ala Ser Pro Val Glu  
 705 710 715 720  
 Asn Lys Glu Val Tyr Gln Cys Arg Leu Cys Asn Ala Lys Leu Ser Ser  
 725 730 735  
 Leu Leu Glu Gln Gly Ser His Glu Arg Leu-Cys Arg Asn Ala Val  
 740 745 750  
 Cys Pro Tyr Cys Ser Leu Arg Phe Ser Pro Glu Leu Lys Gln Glu  
 755 760 765  
 His Glu Ser Lys Cys Glu Tyr Lys Lys Leu Thr Cys Leu Glu Cys Met  
 770 775 780  
 Arg Thr Phe Lys Ser Ser Phe Ser Ile Trp Arg His Gln Val Glu Val  
 785 790 795 800  
 His Asn Gln Asn Asn Met Ala Pro Thr Glu Asn Phe Ser Leu Pro Val  
 805 810 815  
 Leu Asp His Asn Gly Asp Val Thr Gly Ser Ser Arg Pro Gln Ser Gln  
 820 825 830  
 Pro Glu Pro Asn Lys Val Asn His Ile Val Thr Thr Lys Asp Asp Asn  
 835 840 845  
 Val Phe Ser Asp Ser Ser Glu Gln Val Asn Phe Asp Ser Glu Asp Ser  
 850 855 860  
 Ser Cys Leu Pro Glu Asp Leu Ser Leu Ser Lys Gln Leu Lys Ile Gln  
 865 870 875 880  
 Val Lys Glu Glu Pro Val Glu Glu Ala Glu Glu Glu Ala Pro Glu Ala  
 885 890 895  
 Ser Thr Ala Pro Lys Glu Ala Gly Pro Ser Lys Glu Ala Ser Leu Trp  
 900 905 910  
 Pro Cys Glu Lys Cys Gly Lys Met Phe Thr Val His Lys Gln Leu Glu  
 915 920 925  
 Arg His Gln Glu Leu Leu Cys Ser Val Lys Pro Phe Ile Cys His Val  
 930 935 940  
 Cys Asn Lys Ala Phe Arg Thr Asn Phe Arg Leu Trp Ser His Phe Gln  
 945 950 955 960  
 Ser His Met Ser Gln Ala Ser Glu Glu Ser Ala His Lys Glu Ser Glu  
 965 970 975  
 Val Cys Pro Val Pro Thr Asn Ser Pro Ser Pro Pro Pro Leu Pro Pro  
 980 985 990  
 Pro Pro Pro Leu Pro Lys Ile Gln Pro Leu Glu Pro Asp Ser Pro Thr  
 995 1000 1005  
 Gly Leu Ser Glu Asn Pro Thr Pro Ala Thr Glu Lys Leu Phe Val Pro  
 1010 1015 1020  
 Gln Glu Ser Asp Thr Leu Phe Tyr His Ala Pro Pro Leu Ser Ala Ile  
 1025 1030 1035 1040  
 Thr Phe Lys Arg Gln Phe Met Cys Lys Leu Cys His Arg Thr Phe Lys  
 1045 1050 1055  
 Thr Ala Phe Ser Leu Trp Ser His Glu Gln Thr His Asn  
 1060 1065

&lt;210&gt; 3401

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3401

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 120  
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 180  
 gaattagata gttcatcctc attgtgtgtg ctagtaagca ctggtggaaa actctgtagg  
 240  
 ctgattaatg aagatgtgaa tgagcagggt atgcaggat taggacctga agacctccag  
 300  
 agcattatct acaaattgga agaacacgag gaatttttcc cagcatttca ggcatttact  
 360  
 aatgatctac ttgaaatctt agaaattgat gactctggat gccattgtac ctgcagtaaa  
 420  
 gaaattaaaa gtactttcat actgaaaaca aatcaaatca tttttactgt gtaaattgta  
 480  
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 579

&lt;210&gt; 3402

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3402

Met	Pro	His	Phe	Gln	Thr	Leu	Gln	Ala	Ile	Val	Ser	His	Phe	Gln	Lys
1				5					10					15	
Leu	Phe	Asp	Val	Pro	Ser	Leu	Asn	Gly	Val	Tyr	Pro	Arg	Met	Asn	Glu
		20						25					30		
Val	Tyr	Thr	Arg	Leu	Gly	Glu	Met	Asn	Asn	Ala	Val	Arg	Asn	Leu	Gln
	35					40					45				
Glu	Leu	Leu	Glu	Leu	Asp	Ser	Ser	Ser	Ser	Leu	Cys	Val	Leu	Val	Ser
	50				55					60					
Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
65				70					75				80		
Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
			85					90					95		
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
			100					105					110		
Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
		115					120					125			
Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
	130					135					140				
Ile	Phe	Thr	Val												
145															

&lt;210&gt; 3403

&lt;211&gt; 1696

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3403

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240  
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300  
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360  
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420  
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480  
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600  
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660  
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720  
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1500

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<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

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Gln	Ala	Gln	Leu	Glu	Gly	Lys	Val	Lys	Glu	Arg	Arg	Pro	Phe	Leu	
		20					25					30			
Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln
	35						40					45			
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
	50					55					60				
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
65					70				75					80	
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
			85						90					95	
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
		100						105					110		
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
	115						120					125			
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
	130					135					140				
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr
145					150				155					160	
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
			165					170						175	
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala
		180						185					190		
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu
	195						200					205			
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp
	210					215					220				
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225					230				235					240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
			245					250						255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
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Leu	Gln	Ala	Gln	Ser	Glu	Glu	Ala	Arg	Arg	Leu	Leu	Gly	Tyr		
	275						280					285			

<210> 3405

<211> 402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3405

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180
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402

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&lt;210&gt; 3406

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3406

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Ile Glu Ser Ala Arg Gln Ala Gly Asp Ser Ala Lys Met Arg Arg Tyr
20     25     30
Asp Arg Gly Leu Lys Thr Leu Glu Asn Leu Leu Ala Ser Ile Arg Lys
35     40     45
Gly Asn Ala Ile Asp Glu Ala Asp Ile Pro Pro Pro Val Ala Ile Gly
50     55     60
Lys Gly Pro Ala Ser Thr Pro Thr Tyr Ser Pro Ala Pro Thr Gln Pro
65     70     75     80
Ala Pro Arg Ile Ala Ser Ala Pro Glu Pro Arg Val Thr Leu Glu Gly
85     90     95
Pro Ser Ala Thr Ala Pro Ala Ser Ser Pro Gly Leu Ala Lys Pro Gln
100    105    110
Met Pro Pro Gly Pro Cys Ser Pro Pro Ser Gly Pro Val Ala Glu Pro
115    120    125
Pro Ala Arg Leu Gln Ala
130

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&lt;210&gt; 3407

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3407

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tttcccgac accatgcctt ctcggcggtg aggcaggtgg cggcaccgac aggcccgggg
120

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 240  
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 360  
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 420  
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 535

<210> 3408

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3408

Gly	Met	Arg	Gly	Asp	Gly	Glu	Glu	Pro	Pro	Arg	Thr	Ala	Pro	Ser	Arg
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Ser	Ala	Gly	Thr	Phe	Pro	Gly	His	His	Ala	Phe	Ser	Ala	Val	Arg	Gln
			20					25					30		
Val	Ala	Ala	Pro	Thr	Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Pro	Thr
		35					40					45			
Ser	Ser	Val	Ala	Arg	Gln	Val	Ala	Ala	Pro	Thr	Gly	Pro	Ala	Gly	Thr
		50				55					60				
Phe	Pro	Gly	Xaa	Pro	Gly	Leu	Leu	Gly	Lys	Gln	Val	Ala	Ala	Pro	Thr
65					70				75					80	
Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Leu	Ala	Ser	Ser	Ala	Arg	Gln
				85				90					95		
Val	Ala	Glu	Leu	Val	Pro	Arg	Leu	Ile	Phe	Leu	Arg	Gln	Thr	Cys	Leu
			100				105					110			
Gln	Arg	Lys	Leu	Cys	Ser	Thr	Gly	Glu	Thr	Gly	Lys	Cys	Thr	Arg	Tyr
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Trp	Leu	Ile													
		130													

<210> 3409

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3409

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 120  
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 180  
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 240

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 480  
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&lt;210&gt; 3410

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3410

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Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
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		50				55					60				
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			85					90					95		
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			100					105					110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
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&lt;210&gt; 3411

&lt;211&gt; 958

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 3412

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3412

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	20						25						30		
Thr	Val	Gly	Lys	Leu	Lys	Thr	His	Leu	Ser	Asn	Val	Tyr	Pro	Ser	Lys
	35					40					45				
Pro	Leu	Thr	Lys	Asp	Gln	Arg	Leu	Val	Tyr	Ser	Gly	Arg	Leu	Leu	Pro
	50				55				60						
Asp	His	Leu	Gln	Leu	Lys	Asp	Ile	Leu	Arg	Lys	Gln	Asp	Glu	Tyr	His
65				70				75					80		
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			85				90						95		
Ser	Ser	Thr	Asn	Arg	Glu	Ser	His	Glu	Ala	Leu	Ala	Ser	Ser	Ser	Asn



	100		105		110										
Ser	Ser	Ser	Asp	His	Ser	Gly	Ser	Thr	Thr	Pro	Ser	Ser	Gly	Gln	Glu
	115		120		125										
Thr	Leu	Ser	Leu	Ala	Val	Gly	Ser	Ser	Ser	Glu	Gly	Leu	Arg	Gln	Arg
	130		135		140										
Thr	Leu	Pro	Gln	Ala	Gln	Thr	Asp	Gln	Ala	Gln	Ser	His	Gln	Phe	Pro
145			150		155				160						
Tyr	Val	Met	Gln	Gly	Asn	Val	Asp	Asn	Gln	Phe	Pro	Gly	Gln	Ala	Ala
			165		170				175						
Pro	Pro	Gly	Phe	Pro	Val	Tyr	Pro	Ala							
	180				185										

&lt;210&gt; 3413

&lt;211&gt; 3344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3413

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&lt;210&gt; 3414

&lt;211&gt; 723

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3414

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		20						25					30		
Tyr	Gly	Cys	Val	Gln	Gln	Pro	Lys	Thr	Gln	Glu	Ser	Lys	Leu	Lys	Ile
	35						40					45			
Gly	Gly	Val	Ser	Ser	Val	Asn	Glu	Arg	Pro	Ile	Ala	Gln	Gln	Leu	Asn
	50					55					60				
Pro	Gly	Phe	Gln	Leu	Ser	Phe	Ala	Ser	Ser	Gly	Pro	Ser	Val	Leu	Leu
65					70					75				80	
Pro	Ser	Val	Pro	Ala	Val	Ala	Ile	Lys	Val	Phe	Cys	Ser	Gly	Cys	Lys
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Lys	Met	Leu	Tyr	Lys	Gly	Gln	Thr	Ala	Tyr	His	Lys	Thr	Gly	Ser	Thr
		100						105					110		
Gln	Leu	Phe	Cys	Ser	Thr	Arg	Cys	Ile	Thr	Arg	His	Ser	Ser	Pro	Ala
		115					120					125			
Cys	Leu	Pro	Pro	Pro	Pro	Lys	Lys	Thr	Cys	Thr	Asn	Cys	Ser	Lys	Asp
	130					135					140				
Ile	Leu	Asn	Pro	Lys	Asp	Val	Ile	Thr	Thr	Arg	Phe	Glu	Asn	Ser	Tyr
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Pro	Ser	Lys	Asp	Phe	Cys	Ser	Gln	Ser	Cys	Leu	Ser	Ser	Tyr	Glu	Leu
				165					170					175	
Lys	Lys	Lys	Pro	Val	Val	Thr	Ile	Tyr	Thr	Lys	Ser	Ile	Ser	Thr	Lys
			180					185					190		
Cys	Ser	Met	Cys	Gln	Lys	Asn	Ala	Asp	Thr	Arg	Phe	Glu	Val	Lys	Tyr

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Ser Thr Ser Val Thr Ala Tyr Lys Gln Asn Ser Ala Gln Ile Pro Pro		
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Tyr Ala Leu Gly Lys Ser Leu Arg Ser Ser Ala Glu Met Ile Glu Asn		
275	280	285
Thr Asn Ser Leu Gly Lys Thr Glu Leu Phe Cys Ser Ile Asn Cys Leu		
290	295	300
Ser Ala Tyr Arg Val Lys Thr Val Thr Ser Ala Gly Val Gln Val Ser		
305	310	315
Cys His Ser Cys Lys Thr Ser Ala Ile Pro Gln Tyr His Leu Ala Met		
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Ser Asp Gly Thr Ile Tyr Ser Phe Cys Ser Ser Ser Cys Val Val Ala		
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Phe Gln Asn Val Phe Ser Lys Pro Lys Gly Thr Asn Ser Ser Ala Val		
355	360	365
Pro Leu Ser Gln Gly Gln Val Val Val Ser Pro Pro Ser Ser Arg Ser		
370	375	380
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385	390	395
Ile Arg Gly Ser Ala Ala Ala Ser Leu Gln Pro Leu Gly Glu Gln Ser		
405	410	415
Gln Gln Val Ala Leu Thr His Thr Val Val Lys Leu Lys Cys Gln His		
420	425	430
Cys Asn His Leu Phe Ala Thr Lys Pro Glu Leu Leu Phe Tyr Lys Gly		
435	440	445
Lys Met Phe Leu Phe Cys Gly Lys Asn Cys Ser Asp Glu Tyr Lys Lys		
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Gln Gln Ile Met Asn Asp Cys Leu Pro Gln Asn Lys Val Asn Ile Ser		
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Lys Ala Lys Thr Ala Val Thr Glu Leu Pro Ser Ala Arg Thr Asp Thr		
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Thr Pro Val Ile Thr Ser Val Met Ser Leu Ala Lys Ile Pro Ala Thr		

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Ala	Val	Cys													

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&lt;211&gt; 3501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3415

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&lt;210&gt; 3416

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3416

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Ala	Leu	Gln	Ile	Ser	Glu	Asn	Leu	Phe	Ser	Asn	Lys	Val	Leu	Asn	Ala
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Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln
      180              185              190
Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val
      195              200              205
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln
      210              215              220
Pro Gly Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys
225              230              235              240
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&lt;210&gt; 3417

&lt;211&gt; 405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3417

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&lt;210&gt; 3418

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3418

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Leu Glu Arg Arg Cys Ser Pro Asn Leu Ser Arg Glu Val Leu Tyr Glu
      20          25          30
Ile Phe Arg Ser Leu His Thr Leu Val Gly Gln Leu Asp Leu Arg Asp
      35          40          45
Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
      50          55          60
Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

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Phe	Ser	Ser	Ser	Lys	Thr	Val	Thr	Val	Leu	Leu	Leu	Ala	Gln	Thr	Thr	Cys										
			35						40				45													
Leu	Leu	Leu	Phe	Ile	Ile	Ser	Arg	Pro	Gly	Pro	Ser	Ser	Ser	Pro	Ala	Gly										
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Ser	Ser	Phe	Leu	Gly	Gln	Leu	Phe	Ser	Gln	His	Pro	Asp	Val	Phe	Tyr											
				85					90					95												
Leu	Met	Glu	Pro	Ala	Trp	His	Val	Trp	Thr	Thr	Leu	Ser	Gln	Gly	Ser											
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Ala	Ala	Thr	Leu	His	Met	Ala	Val	Arg	Asp	Leu	Met	Arg	Ser	Ile	Phe											
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Leu	Cys	Asp	Met	Asp	Val	Phe	Asp	Ala	Tyr	Met	Glu	Pro	Gly	Pro	Arg											
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				165					170					175												
His	Cys	Arg	Leu	Leu	Cys	Ser	Gln	Gln	Pro	Phe	Glu	Val	Val	Glu	Lys											
			180					185					190													
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			195					200					205													
Asn	Leu	Gln	Ser	Leu	Tyr	Pro	Leu	Leu	Lys	Asp	Pro	Ser	Leu	Asn	Leu											
		210				215					220															
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225					230					235				240												
Glu	Ala	Ala	Gly	Pro	Ile	Leu	Ala	Arg	Asp	Asn	Gly	Ile	Val	Leu	Gly											
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<210> 3423

<211> 1851

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3423

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 <211> 136  
 <212> PRT  
 <213> Homo sapiens

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 Ala Ser Tyr Gly Val Arg Gln Asp Gly Asp Pro Ala Phe Leu Tyr Leu  
 35 40 45  
 Leu Ser Ala Pro Arg Glu Ala Pro Ala Thr Gly Pro Ser Pro Gln His  
 50 55 60  
 Pro Gln Lys Met Asp Gly Glu Leu Gly Arg Leu Phe Pro Pro Ser Leu  
 65 70 75 80  
 Gly Leu Pro Pro Gly Pro Gln Pro Ala Ala Ser Ser Leu Pro Ser Pro  
 85 90 95  
 Leu Gln Pro Ser Trp Ser Cys Pro Ser Cys Thr Phe Ile Asn Ala Pro  
 100 105 110  
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<210> 3425  
 <211> 1416  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3426

&lt;211&gt; 410

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3426

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 Arg Lys Ala Ala Ser Pro Gly Ala Pro Arg Pro Trp Pro Arg His Ser  
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 Thr His Met Ala Ser Gly Val Gly Ala Ala Phe Glu Glu Leu Pro His

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Glu	Val	Cys	Arg	Glu	Cys	Gly	Phe	Cys	Tyr	Cys	Arg	Arg	His	Ala	Glu
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			180					185					190		
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&lt;210&gt; 3427

&lt;211&gt; 580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3427

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60

ccggatttca atgtcatagt tcccattgtc aatgacatca tcggagaact tgacctgctg

120



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 240  
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 300  
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 420  
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 480  
 ccctgaagcc ccatggtcca gttccaattc ctgaagcctt ctactgcttg cagggcctgg  
 540  
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 580

&lt;210&gt; 3428

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3428

Met	Asp	Ser	Leu	Ala	Leu	Ser	Asn	Ile	Thr	Gly	Ala	Ser	Val	Asp	Gly
1				5					10					15	
Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
			35				40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
		50				55					60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
65					70					75				80	
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85						90					95	
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
			100					105					110		
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
			115				120					125			
Glu	Arg	Gly	Ser												
			130												

&lt;210&gt; 3429

&lt;211&gt; 634

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3429

cccggggggc tgggagggga ggcacagtct ggtctgcact gaggtaggcc gccgtggaga  
 60  
 aggggaagga gccggcagct ggatgtggca ggatgatttc tcctgagagt agccctcgcg  
 120  
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 180

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 240  
 cagcacatcc ctggctgcag tgcccagcag ctcccagcat gctccgtgat gttcagtggg  
 300  
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<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

Phe	Leu	Leu	Arg	Val	Ala	Leu	Ala	Val	Ser	Phe	Leu	Phe	Ile	Leu	Ser
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Arg	Arg	Ser	Leu	His	Glu	Gln	Val	His	Gln	Gly	Pro	Val	Pro	Leu	Ser
			20					25					30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35				40						45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
		50				55					60				
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75					80
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
				85					90					95	
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
			100					105						110	
Gly	Thr	His	Pro	Ala	Ala	Pro	Gly	Ser	Val						
			115				120								

<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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 120  
 ctgcgtggga gcagcgcccc aatgccagcg cgtcacgtcg ccagcgctgc cctagcacgc  
 180  
 agcgccgcca gccgtgtcgc caacagtacc aaatcgtcgt gcagcggtt cgccccgccg  
 240

gacttcaacc attgcctcaa ggattgggac tataatggcc ttcctgtgct caccaccaac  
 300  
 gccatcggcc agtgggatct ggtgtgtgac ctgggctggc aggtgaccc ggagcagatc  
 360  
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 420  
 ggccgtcgcg ggattgtgct gctgaccttg gggctgggtgg gccctgtgag agtaggaggg  
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 720  
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 900  
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 960  
 aaaaatctgc ttatcctggg cttcaccaac ttcattgccc atgccattcg cactgctac  
 1020  
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 ggcacccctc ttctctccat gacccttacc ggcattgctt ccctggctcct gctgggcctg  
 1200  
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 1260  
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 1320  
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 1380  
 ggccctgggccc tgatca  
 1396

&lt;210&gt; 3432

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3432

Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu  
 1 5 10 15  
 Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu  
 20 25 30  
 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu  
 35 40 45  
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

50	55	60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly		
65	70	75
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu		80
	85	90
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		95
	100	105
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		110
	115	120
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		125
	130	135
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		140
	145	150
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		155
	160	165
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		170
	175	180
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		185
	190	195
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala		200
	205	210
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro		215
	220	225
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala		230
	235	240
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala		245
	250	255
Ala Ile Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val		260
	265	270
Arg Gly Arg Gly Leu Gly Leu Ile		275
	280	285
290	295	

&lt;210&gt; 3433

&lt;211&gt; 1257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3433

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 120  
 ccgagccact cccgttccca caccaggtcg aacttgaaaa gggacgtcgc ccacctgtac  
 180  
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 240  
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 300  
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 360  
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 420  
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 480

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 540  
 agctgctgtg agagctcacc caggagacgg gtttcctgtg gtctctgtgt ggggtacagg  
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 660  
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 720  
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 780  
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 840  
 aatccacccg tgtacaccac aatgtccctc tcgtctgcac cgtcctcctg tctacactgg  
 900  
 caccactgcc ccagctatac caccaccccg tctacataat ccacccatct gtctacacca  
 960  
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 1080  
 ccaccacccc acctacacca tcccaccatc tacgccattg ccaaattctac acagacgacc  
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<210> 3434

<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

Ala	Thr	Arg	Gly	Ala	Gly	Pro	Gln	Gln	Arg	Leu	Leu	Pro	Ser	Ala	Gln
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Arg	Pro	Ser	Ser	Val	Pro	Pro	Ser	Pro	Ser	Pro	Arg	Pro	Leu	Pro	Gly
			20					25					30		
Gly	Arg	Gln	Arg	Pro	Gln	Arg	Pro	Ser	His	Ser	Arg	Ser	His	Thr	Arg
			35				40					45			
Ser	Asn	Leu	Lys	Arg	Asp	Val	Ala	His	Leu	Tyr	Arg	Gly	Val	Gly	Ser
			50				55				60				
Arg	Tyr	Ile	Met	Gly	Ser	Gly	Glu	Ser	Phe	Met	Gln	Leu	Gln	Gln	Arg
						70				75				80	
Leu	Leu	Arg	Glu	Lys	Glu	Ala	Lys	Ile	Arg	Lys	Ala	Leu	Asp	Arg	Leu
				85					90					95	
Arg	Lys	Lys	Arg	His	Leu	Leu	Arg	Arg	Gln	Arg	Thr	Arg	Arg	Glu	Phe
			100					105					110		
Pro	Val	Ile	Ser	Val	Val	Gly	Tyr	Thr	Asn	Cys	Gly	Glu	His	Ala	Pro
			115				120					125			
Arg	Gly	Gly	Ala	Phe	Arg	Gly	Leu	Arg	Val	Thr	Gly	Glu	Asp	Ser	Pro
			130				135				140				
Gly	Gly	Gly	Gln	Gly	Val	Pro	Val	Val	Ser	Val	Val	Pro	Tyr	Asp	Ser
					150					155				160	
Cys	Gly	Glu	His	Val	Pro	Arg	Arg	Gly	Gly	Ser	His	Gly	Arg	Arg	Val

165 170 175  
 Gly Tyr Thr Ser Cys Cys Glu Ser Ser Pro Arg Arg Arg Val Ser Cys  
 180 185 190  
 Gly Leu Cys Val Gly Tyr Ser Ser Gln Gly Glu Asp Val Ile Tyr Pro  
 195 200 205  
 Ile Leu Pro Ser Arg Ala Leu Pro Pro Cys Leu Tyr His Asn Leu Pro  
 210 215 220  
 Ser Ile Tyr Thr Ile Leu Leu Ser Arg Pro Ser Pro Leu Pro Tyr Leu  
 225 230 235 240  
 Tyr His His Pro Val Tyr Thr Ile His Pro Ser Thr Pro Ser Pro Leu  
 245 250 255  
 Leu Cys Leu Tyr His Pro Pro Val Tyr Thr Ser Thr Thr Thr Pro Ser  
 260 265 270  
 Ile Pro Pro Pro Arg Leu His Asn Pro Pro Val Tyr Thr Thr Met Ser  
 275 280 285  
 Pro Ser Ser Ala Pro Ser Ser Cys Leu His Trp His His Cys Pro Ser  
 290 295 300  
 Tyr Thr Thr Thr Pro Ser Thr  
 305 310

&lt;210&gt; 3435

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3435

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 720  
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 1225

&lt;210&gt; 3436

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3436

Xaa His Ser Leu Tyr Asp His Trp Gly Lys Glu Asp Glu Asn Leu Gly  
 1 5 10 15  
 Ser Val Lys Gln Tyr Val Glu Ser Ile Asp Val Ser Ser Tyr Thr Glu  
 20 25 30  
 Glu Phe Asn Val Ser Cys Leu Thr Asp Ser Asn Ala Asp Thr Tyr Trp  
 35 40 45  
 Glu Ser Asp Gly Ser Gln Cys Gln His Trp Val Arg Leu Thr Met Lys  
 50 55 60  
 Lys Gly Thr Ile Val Lys Lys Leu Leu Leu Ala Val Asp Thr Thr Asp  
 65 70 75 80  
 Asp Asn Phe Met Pro Lys Arg Val Val Val Tyr Gly Gly Glu Gly Asp  
 85 90 95  
 Asn Leu Lys Lys Leu Ser Asp Val Ser Ile Asp Xaa Arg Pro Ser Ser  
 100 105 110  
 Gly Xaa Val Cys Val Leu Glu Asp Met Thr Val His Leu Pro Ile Ile  
 115 120 125  
 Glu Ile Arg Ile Val Glu Cys Arg Asp Asp Gly Ile Asp Val Arg Leu  
 130 135 140  
 Arg Gly Val Lys Ile Lys Ser Ser Arg Gln Arg Glu Leu Gly Leu Asn  
 145 150 155 160  
 Ala Asp Leu Phe Gln Pro Thr Ser Leu Val Arg Tyr Pro Arg Leu Glu  
 165 170 175  
 Gly Thr Asp Pro Glu Val Leu Tyr Arg Arg Ala Val Leu Leu Gln Arg  
 180 185 190  
 Phe Ile Lys Ile Leu Asp Ser Val Leu His His Leu Val Pro Ala Trp  
 195 200 205  
 Asp His Thr Leu Gly Thr Phe Ser Glu Ile Lys Gln Val Lys Gln Phe  
 210 215 220  
 Leu Leu Leu Ser Arg Gln Arg Pro Gly Leu Val Ala Gln Cys Leu Arg  
 225 230 235 240  
 Asp Ser Glu Ser Ser Lys Pro Ser Phe Met Pro Arg Leu Tyr Ile Asn  
 245 250 255  
 Arg Arg Leu Ala Met Glu His Arg Ala Cys Pro Ser Arg Asp Pro Ala

260 265 270  
 Cys Lys Asn Ala Val Phe Thr Gln Val Tyr Glu Gly Leu Lys Pro Ser  
 275 280 285  
 Asp Lys Tyr Glu Lys Pro Leu Asp Tyr Arg Trp Pro Met Arg Tyr Asp  
 290 295 300  
 Gln Trp Trp Glu Cys Lys Phe Ile Ala Glu Gly Ile Ile Asp Gln Gly  
 305 310 315 320  
 Gly Gly Phe Arg Asp Ser Leu Ala Asp Met Ser Glu Glu Leu Cys Pro  
 325 330 335  
 Ser Ser Ala Asp Thr Pro Val Pro Leu Pro Phe Phe Val Arg Thr Ala  
 340 345 350  
 Asn Gln Gly Asn Gly Thr Gly Glu Ala Arg Asp Met Tyr Val Pro Asn  
 355 360 365  
 Pro Ser Cys Arg Asp Phe Ala Lys Tyr Glu Trp Ile Gly Gln Leu Met  
 370 375 380  
 Gly Ala Ala Leu Arg Gly Lys Glu Phe Leu Val Leu Ala Leu Pro Gly  
 385 390 395 400  
 Phe Val Trp Lys Gln Leu Ser Ala  
 405

&lt;210&gt; 3437

&lt;211&gt; 2081

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3437

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 120  
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 180  
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 240  
 aaaagagatt tccaagttga agcaacaact gcagaggacg aagctgagcc gcagtgggaa  
 300  
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 360  
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 840



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 1380  
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 1440  
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 1860  
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 1920  
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 1980  
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 2040  
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 2081

&lt;210&gt; 3438

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3438

Ala Cys Gln Phe Leu Cys Thr Gln Ala Leu Ser Ile Leu Gly Gln His  
 1 5 10 15  
 Arg Pro Pro Lys Arg Asp Phe Gln Val Glu Ala Thr Thr Ala Glu Asp  
 20 25 30  
 Glu Ala Glu Pro Gln Trp Glu Arg Glu Gly Ala Arg Phe Thr Thr Pro

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<210> 3439
<211> 1519
<212> DNA
<213> Homo sapiens
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2612

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 1260  
 atgttagtgt gagccccag cccctgccc gcgccccct cccagggcc ctgcctcctc  
 1320  
 cccaccccct cgtcagccag cgttgcgtgt ccttcagag aaaaggattg tgggaaactc  
 1380  
 caggactctt cccaccgct cccagcgct gcctgtggg gctgcctgca tgcctccctc  
 1440  
 gcacctgggg gtaccgcat ccacttcctt tccccctttt aacaaaagag aagaacgaat  
 1500  
 tccaaaccaa aaaaaaaaaa  
 1519

<210> 3440

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

Cys	Ala	Pro	Pro	Ile	Pro	Leu	Leu	His	Pro	Pro	Thr	Ser	Leu	Thr
1			5				10					15		
Leu	Ser	Pro	Cys	Ser	Pro	Val	Ser	Arg	Pro	Pro	Arg	Ala	Ser	Thr
			20				25					30		Ala
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg
			35				40					45		His
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly
			50				55				60			Pro
Arg	Arg	Pro	Arg	Xaa	Pro	Gly	Gly	Pro	Gln	His	His	Gln	Pro	Gln
65				70					75					80
Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro
			85						90				95	
Leu	Pro	Pro	Asn	Arg	Pro	Pro	Gln	Asn	Pro	Gly	Pro	Thr	Leu	Pro
			100					105					110	Trp
Arg	Gln	Arg	Asp	Lys	Gly	Gly	Pro	Ser	Pro	Leu	Pro	Glu	Ala	Arg
			115				120					125		Thr
Pro	Trp	Gly	Gly	Gly	Glu	Asp	Val	Ser	Ala	Gly	Pro	Leu	Xaa	Thr
			130				135				140			Pro
Phe	Leu	Ser	Ala	Pro	Leu	Val	Pro	Arg	Ser	Pro	Gly	Gly	Glu	Ser
145				150					155					160
Asp	Ser	Ser	Gln	Ala	Gly	Thr	Arg	Leu	Val	Pro	Glu	His	Ala	Ala
			165					170					175	
His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly
			180					185					190	Ser
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln
			195				200					205		Pro
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp
			210				215				220			Arg
Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Gly
225				230						235				240
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu
			245					250					255	Arg
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu
														Phe

	260		265		270
Arg Ser Asn	Leu Val Pro Gly Ala	Ala Gly Leu Cys Met	Leu Val		
	275		280		285

&lt;210&gt; 3441

&lt;211&gt; 2074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3441

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gagctgtatc gagcctgcgc cgtggagggtg aagcggcaga tctggcaaga caaccaggcc
120
ctcttcgggg acgaggtttc cccactcctg aagcagtaca tcctggagaa ggagagcgct
180
ctcttcagta cagagctctc tgcctgcac aactttttca gtccttcccc caagaccagg
240
cgccagggcg aggtggtgca gcggtgacg cggatggtgg ggaagaacgt gaagctgtac
300
gacatggtgc tgcagtttct gcgcacgctc ttcctgcgca cgcggaatgt gcactactgc
360
acgtgcggg ctgagctgct catgtccctg cacgacctgg acgtgggtga aatctgcacc
420
gtggaccctg gccacaagtt cacctggtgc ctggacgcct gcatccgaga gcggttcgtg
480
gacagcaaga gggcgcgga gctgcagggg tttctcgatg acgtcaagaa gggccaggag
540
caggtgctgg gggacctgtc catgatcctg tgtgaccctc tcgccatcaa cacgtggca
600
ctgagcacag tcaggcacct gcaggagctg gtcggccagg agacactgcc cagggacagc
660
cccgcctcc tgctgctgct ccggtgctg gcgctggggc agggagcctg ggacatgatc
720
gacagccagg tcttcaagga gcccaagatg gaggtagagc tcatcaccag gttcctcccg
780
atgctcatgt ccttcctggt ggatgactac actttcaatg tggatcagaa acttccggct
840
gaggagaaag cccagttctc atatccaaac acacttcccg aaagcttcac taagtttctg
900
caggagcagc gcatggcctg cgagggtggg ctgtactacg tcctgcacat caccaagcag
960
aggaacaaga acgcgtcctc ccgctgctg cccgggctgg tggagacctt tggcgacttg
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gcctttggcg acatcttctc ccacctgctc acgggcaacc ttgcgctgct ggccgacgaa
1080
tttgcccttg aggacttctg cagcagcctc ttcgatggct tcttcctcac cgctctcca
1140
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1200
gccccatcta agctggaggc gttgcagaag gccctggagc ctacaggcca gagcggagag
1260
gcagtgaagg agctttactc ccagctcggc gagaagctgg aacagctgga tcaccggaag
1320

```

```

cccagcccgg cacaggctgc ggagacgccg gccctggagc tgccctccc cagcgtgccc
1380
gcccctgccc cgctctgagg gccctccaga cctgctcggg tgctggggcc atgccgagtc
1440
gcgcccttgc tcagccggaa gaggtccccg gacctggatg tacagggcag tctctcttcc
1500
cggggctatg gctgggcctg tcctgccgtc atggccccct gcttcttctt ccttggagct
1560
ggctcccgga ccttggccac catccatgca gtggctccca gggcagagcc tctccttgta
1620
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1680
tgttttccaa ggggagaggg cggggcctga ggggtggggc ggggcctctt cattggccca
1740
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1800
ctcgtggagg ccgtgtgggg gcagcagcct ggcctgtgcc atgggtgggtg tcctggggcc
1860
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1920
tgccagcag tgctgccttc agcggccgtg acggggccag ctggacacac ggtgagattt
1980
tctcgtatgt aaataaaagg caatttggtg aacgtggaaa aaaaaaaaaa aaaaaaaaaa
2040
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa
2074

```

&lt;210&gt; 3442

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3442

```

Met Val Gly Lys Asn Val Lys Leu Tyr Asp Met Val Leu Gln Phe Leu
1      5      10      15
Arg Thr Leu Phe Leu Arg Thr Arg Asn Val His Tyr Cys Thr Leu Arg
20     25     30
Ala Glu Leu Leu Met Ser Leu His Asp Leu Asp Val Gly Glu Ile Cys
35     40     45
Thr Val Asp Pro Cys His Lys Phe Thr Trp Cys Leu Asp Ala Cys Ile
50     55     60
Arg Glu Arg Phe Val Asp Ser Lys Arg Ala Arg Glu Leu Gln Gly Phe
65     70     75     80
Leu Asp Asp Val Lys Lys Gly Gln Glu Gln Val Leu Gly Asp Leu Ser
85     90     95
Met Ile Leu Cys Asp Pro Phe Ala Ile Asn Thr Leu Ala Leu Ser Thr
100    105    110
Val Arg His Leu Gln Glu Leu Val Gly Gln Glu Thr Leu Pro Arg Asp
115    120    125
Ser Pro Asp Leu Leu Leu Leu Leu Arg Leu Leu Ala Leu Gly Gln Gly
130    135    140
Ala Trp Asp Met Ile Asp Ser Gln Val Phe Lys Glu Pro Lys Met Glu
145    150    155    160
Val Glu Leu Ile Thr Arg Phe Leu Pro Met Leu Met Ser Phe Leu Val

```

```

      165      170      175
Asp Asp Tyr Thr Phe Asn Val Asp Gln Lys Leu Pro Ala Glu Glu Lys
      180      185      190
Ala Pro Val Ser Tyr Pro Asn Thr Leu Pro Glu Ser Phe Thr Lys Phe
      195      200      205
Leu Gln Glu Gln Arg Met Ala Cys Glu Val Gly Leu Tyr Tyr Val Leu
      210      215      220
His Ile Thr Lys Gln Arg Asn Lys Asn Ala Leu Leu Arg Leu Leu Pro
225      230      235      240
Gly Leu Val Glu Thr Phe Gly Asp Leu Ala Phe Gly Asp Ile Phe Leu
      245      250      255
His Leu Leu Thr Gly Asn Leu Ala Leu Leu Ala Asp Glu Phe Ala Leu
      260      265      270
Glu Asp Phe Cys Ser Ser Leu Phe Asp Gly Phe Phe Leu Thr Ala Ser
      275      280      285
Pro Arg Lys Glu Asn Val His Arg His Ala Leu Arg Leu Leu Ile His
      290      295      300
Leu His Pro Arg Val Ala Pro Ser Lys Leu Glu Ala Leu Gln Lys Ala
305      310      315      320
Leu Glu Pro Thr Gly Gln Ser Gly Glu Ala Val Lys Glu Leu Tyr Ser
      325      330      335
Gln Leu Gly Glu Lys Leu Glu Gln Leu Asp His Arg Lys Pro Ser Pro
      340      345      350
Ala Gln Ala Ala Glu Thr Pro Ala Leu Glu Leu Pro Leu Pro Ser Val
      355      360      365
Pro Ala Pro Ala Pro Leu
370

```

&lt;210&gt; 3443

&lt;211&gt; 2070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3443

```

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aacaaaataa aggtatgcta tgttgactat ggttttagtg aaaatgttga aaaaagcaaa
120
gcatacaaat taaacccgaa gttttgttca ctctcatttc aagctacaaa atgtaagctt
180
gcaggcttgg aagtcctaag cgatgaccct gatctagtga aggtggttga atctttaact
240
tgtggaaaga tctttgcagt ggaaataact gacaaagctg acattccact tgttgttctg
300
tacgatacct caggagaaga tgatatcaat atcaatgcc cctgcttgaa ggctatatgt
360
gacaagtcac tagagggttca cctgcagggt gacgccatgt acacaaatgt caaaataact
420
aatatttgct ctgatgggac actctactgc caggtgcctt gtaagggctt gaacaagctc
480
agtgccttc tacgtaagat agaggactac ttccattgca agcacatgac ctctgagtgc
540
tttgtttcat tacccttctg tgggaaaatc tgccctctcc attgcaaagg aaaatggtta
600

```

cgagtagaga tcacaaatgt tcacagcagc cgggctcttg atgttcagtt cctggactct  
660  
ggcactgtga catctgtaaa agtgtcagag ctcagggaaa ttccacctcg gtttctacaa  
720  
gaaatgattg caataccacc tcaggccatt aagtgtgtgt tagcagatct tccacaatct  
780  
attggcatgt ggacaccaga tgcagtgtgt tggttaagag attctgtttt gaattgtctg  
840  
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900  
tttaccctta agaacttccc tgacctcat cgcagtatta atcgccagat tacaaatgca  
960  
gacttgtgga agcatcagaa ggatgtgttt ttgagtcca tatccagtgg agctgactct  
1020  
cccaacagca aaaatggcaa catgccatg tcgggcaaca ctggagagaa tttcagaaag  
1080  
aacctcacag atgtcatcaa aaagtccatg gtggaccata cgagcgcttt ctccacagag  
1140  
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1200  
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1260  
gttctgatgg aagagatgat tctatattac agcgtgtctg aagagcgcca catagcagt  
1320  
gagaaagacc aagtgtatgc tgcaaaagtg gaaaataagt ggcacagggt gcttttaaaa  
1380  
ggaatcctga ccaatggact ggtatctgtg tatgagctgg attatggcaa acacgaatta  
1440  
gtcaacataa gaaaagtaca gcccctagtg gacatgttcc gaaagctgcc cttccaagca  
1500  
gtcacagctc aacttgcagg agtgaagtgc aaccagtggc ctgaggaggc ttctatgggt  
1560  
tttcgaaatc atgtggagaa gaaacctctg gtggcactgg tgcagacagt cattgaaaat  
1620  
gctaaccctt gggaccgga agtagtggc tacttagtgg acacatcgtt gccagacacc  
1680  
gatacctgga ttcattgatt tatgtcagag tatctgatag agctttcaaa agttaattaa  
1740  
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1800  
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1860  
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1920  
aaagaaaatt gtacttgaat tattactata atattagaat aaaaatgttt atcaatataa  
1980  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
2040  
aaaaaaaaaa aaaaaaaaaa aaaaaagggg  
2070

&lt;210&gt; 3444

&lt;211&gt; 579

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3444

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Leu Ala Val Asn Ala Glu Glu Asp Ala Trp Leu Arg Ala Gln Val Ile
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Ser Thr Glu Glu Asn Lys Ile Lys Val Cys Tyr Val Asp Tyr Gly Phe
      20           25           30
Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
 35           40           45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
 50           55           60
Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
 65           70           75           80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
      85           90           95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
      100           105           110
Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
      115           120           125
Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
      130           135           140
Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
      145           150           155           160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
      165           170           175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
      180           185           190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
      195           200           205
Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
      210           215           220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
      225           230           235           240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
      245           250           255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
      260           265           270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
      275           280           285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
      290           295           300
Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
      305           310           315           320
Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
      325           330           335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
      340           345           350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
      355           360           365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
      370           375           380
Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
      385           390           395           400
Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

```



405 410 415  
 His Lys Leu Glu Val Leu Met Glu Glu Met Ile Leu Tyr Tyr Ser Val  
 420 425 430  
 Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala  
 435 440 445  
 Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr  
 450 455 460  
 Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu  
 465 470 475 480  
 Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu  
 485 490 495  
 Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln  
 500 505 510  
 Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys  
 515 520 525  
 Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp  
 530 535 540  
 Asp Arg Lys Val Val Val Tyr Leu Val Asp Thr Ser Leu Pro Asp Thr  
 545 550 555 560  
 Asp Thr Trp Ile His Asp Phe Met Ser Glu Tyr Leu Ile Glu Leu Ser  
 565 570 575  
 Lys Val Asn

&lt;210&gt; 3445

&lt;211&gt; 2086

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3445

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 60  
 tggcagtggc ctggccggcg ccttggctga gaggccttaa ccccgccggg cggcgcgcg  
 120  
 cctgcatgcg agttggggcg cgggcggggg tggagcctac tcggggcgac tgcgatggac  
 180  
 gccttagaag gagagagctt tgcgctgtct ttctcctccg cctctgatgc agaatttgat  
 240  
 gctgtgggtg gatattttaga ggacattatc atggatgacg agttccagtt attacagaga  
 300  
 aatttcatgg acaagtacta cctggagttt gaagacacag aagagaataa actcatctac  
 360  
 acacctatct ttaatgaata catttctttg gtagaaaaat acattgaaga acagctgctg  
 420  
 cagcggattc ctgagttcaa catggcagcc ttcaccacaa cattacacca tctgttccgt  
 480  
 ttgaggcacc ataaggatga agtggctggg gacatattcg acatgctgct caccttcaca  
 540  
 gattttctgg ctttttaaga aatgtttttg gactacagag cagaaaaaga aggccgagga  
 600  
 ctggacttaa gcagtggctt agtggtgact tcattgtgca aatcatcttc tctgccagct  
 660  
 tcccagaaca atctgcggca ctaggctcta cctccagcca atgaatggga tcattctgga  
 720

tgtcaccagc ccaataggct cagctcatga tgacagaaca catcttggaa agactgactc  
 780  
 tgttatgtaa ctcttcattt atgttaagta ttaataggct aaaacaaaaa tgacctaac  
 840  
 ctctggacc tatttatact gaaacacctt cttgtattca ttaaccatag tactcctccc  
 900  
 cacctcaagt agacacctct ctcaggagct tctgagtcag acgcctctgg agcgagccct  
 960  
 atgtcaggca ctccacctgg ggggcccttc cccagcatat ctgctggtgt gtaagtgtgg  
 1020  
 actaaccgcg cgccaccacc ctctgttcca gcaggctctg catgaatctt tgtgcacttg  
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 1380  
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 1440  
 agatcaaagt attatatgct gtgtgctttt taggtgtttg ttagtactgt gaaggcaaaa  
 1500  
 atgctttcta cattgacatt cattcctatt ttactgggca cctatgaatg tatgctgtgt  
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 1620  
 aatcctttgt gtataaacca gtttgtaagg ttctctgggt taggtaggga ctctgcagtt  
 1680  
 tcttctgtgc aaaatctctc ctaccaagat ggtgttccac tgtccagccc agcatgagta  
 1740  
 gcaggtagag cacagcttta ctggctgttt gtatgctttg gtttagtgca atgtgtggta  
 1800  
 gattacttat cagaaaacat atatgtcatc tctagaacga agaaaaagca tagtagttca  
 1860  
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 1920  
 cttttcactt ggccattctg gttttaaagg acaagctaca agctctgtgt ttctgtactg  
 1980  
 atgtgtcact tattaaatac ttttgtacca tgagtataaac ttcagggtgtt tcgcaagaac  
 2040  
 caccattctc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa  
 2086

&lt;210&gt; 3446

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3446

Met Asp Ala Leu Glu Gly Glu Ser Phe Ala Leu Ser Phe Ser Ser Ala

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      1             5             10             15
Ser Asp Ala Glu Phe Asp Ala Val Val Gly Tyr Leu Glu Asp Ile Ile
      20             25             30
Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr
      35             40             45
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro
      50             55             60
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln
      65             70             75             80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr
      85             90             95
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly
      100            105            110
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys
      115            120            125
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp
      130            135            140
Leu Ser Ser Gly Leu Val Thr Ser Leu Cys Lys Ser Ser Ser Leu
      145            150            155            160
Pro Ala Ser Gln Asn Asn Leu Arg His
      165

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&lt;210&gt; 3447

&lt;211&gt; 936

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3447

```

acgcgtgaag ggtttgcggg gaagatggag tatcccgcgc cggccacggt gcaggccgcg
60
gacggcggag cggccggggc ttacagcagc tcggagtgtc tggagggcca ggagccggag
120
ggggtgcgct ttgaccgcga gagggcgcg cgcctgtggg aagccgtgtc cggtgcccag
180
ccggtgggta gagaggaagt ggagcacatg atccagaaga accaatgtct cttcaccaac
240
accagtgtga aggtttgctg cgccttgctt atttctgagt ccagaagct ggcacattac
300
cagagcaaaa aacatgccaa caaagtgaag agatacctag caatccatgg aatggagaca
360
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420
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480
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540
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660
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780

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cagtaccaag ctcatgtcag cggcttcaaa cacaagaacc agtcaccaaa aacagtggca  
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<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

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Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
			20					25					30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
		35					40					45			
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
	50					55					60				
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65					70					75					80
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
				85					90					95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
			100					105					110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
		115					120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130						135				140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
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Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
				165					170					175	
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
			180					185					190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
		195					200					205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
		210				215					220				
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
				230						235					240
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
				245					250					255	
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
			260					265					270		
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
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Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
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<210> 3449

<211> 877

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3449

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ccggcccttc tggccggcac caaccccggt gctgtcgtcg cggatggagg cagttgcccc
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240
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300
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360
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480
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720
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780
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877

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&lt;210&gt; 3450

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3450

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1           5           10           15
Ala Ser Ser Asn Pro Pro Gly Ala Pro Ala Leu Pro Leu His Asn Ser
20           25           30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
35           40           45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
50           55           60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
65           70           75           80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
85           90           95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

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	100		105		110										
Leu	Ala	His	Asn	Ala	Pro	Val	Lys	Val	Lys	Asn	Ala	Gln	Gly	Trp	Ser
	115						120					125			
Pro	Leu	Ala	Glu	Ala	Ile	Ser	Tyr	Gly	Asp	Arg	Gln	Met	Ile	Thr	Ala
	130					135					140				
Leu	Leu	Arg	Lys	Leu	Lys	Gln	Gln	Ser	Arg	Glu	Ser	Val	Glu	Glu	Lys
145					150					155					160
Arg	Pro	Arg	Leu	Leu	Lys	Ala	Leu	Lys	Glu	Leu	Gly	Asp	Phe	Tyr	Leu
			165						170					175	
Glu	Leu	His	Trp	Asp	Phe	Gln	Ser	Trp	Val	Pro	Leu	Leu	Ser	Arg	Ile
		180						185					190		
Leu	Pro	Ser	Asp	Ala	Cys	Lys	Ile	Tyr	Lys	Gln	Gly	Ile	Asn	Ile	Arg
	195						200					205			
Leu	Asp	Thr	Thr	Leu	Ile	Asp	Phe	Thr	Asp	Met	Lys	Cys	Gln	Arg	Gly
	210					215					220				
Asp	Leu	Ser	Phe	Ile	Phe	Asn	Gly	Asp	Ala	Ala	Pro	Ser	Glu	Ser	Phe
225					230					235					240
Val	Val	Leu	Asp	Asn	Glu	Gln	Lys	Val	Tyr	Gln	Arg	Ile	His	His	Glu
			245						250				255		
Ala	His	Ile	Pro	Gly	Ile	Arg	Asp	Gly	Asn	Arg	Arg	Arg	Gly	Gly	Tyr
		260						265					270		
Phe	Asn	Glu	Gln												
		275													

&lt;210&gt; 3451

&lt;211&gt; 595

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3451

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gaaatattca gtaagtagtg ccctgccatt gcaggtttgg atgtccttct gccagcaaaa
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cccagcatga acctctggct tgtggagatg tcttcagct ggaaacctga gtgagcgaag
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595

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&lt;210&gt; 3452

&lt;211&gt; 192

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3452

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Leu Ile Ala Thr Asn Thr Thr Glu Asn Ser Thr Arg Glu Glu Val Asn
              20              25              30
Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
              35              40              45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
              50              55              60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
65              70              75              80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
              85              90              95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
              100             105             110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
              115             120             125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
              130             135             140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145             150             155             160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
              165             170             175
Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
              180             185             190

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<210> 3453

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3453

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300
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477

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<210> 3454

<211> 159

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3454

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 20 25 30  
 Pro Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly  
 35 40 45  
 Ile Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile  
 50 55 60  
 Lys Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu  
 65 70 75 80  
 Thr Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val  
 85 90 95  
 Ile Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys  
 100 105 110  
 Phe Arg Pro Pro Glu Thr Thr Glu Arg Ala Lys Ile Val Ile Arg Glu  
 115 120 125  
 Leu Leu Pro Asn Gly Leu Arg Glu Ser Ile Ser Lys Val Arg Ser Ser  
 130 135 140  
 Val Ala Tyr Ala Val Ser Ala Ile Ala His Trp Asp Trp Pro Glu  
 145 150 155

&lt;210&gt; 3455

&lt;211&gt; 4886

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3455

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 120  
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 180  
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 240  
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 720



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&lt;210&gt; 3456

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3456

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Lys	Lys	Gln	Arg	Arg	Gly	Arg	Lys	Glu	Gly	Glu	Glu	Asp	Gln	Asn	
		20					25					30			
Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro
		35					40					45			
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met
	50					55					60				
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr
65					70					75				80	
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg
			85						90					95	
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly
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Val	Ile	Phe	Pro	Gln											

115

<210> 3457  
 <211> 646  
 <212> DNA  
 <213> Homo sapiens

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<210> 3458  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 3458  
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<210> 3459  
 <211> 592  
 <212> DNA  
 <213> Homo sapiens

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 240  
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 420  
 ggccccggcc acgtccctgc ccccgagct ggccttcagc ggggacagtg gtcagcactg  
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 592

&lt;210&gt; 3460

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3460

Met	Gly	Pro	Ser	Gly	Pro	Ala	Ala	Thr	Pro	Thr	Thr	Trp	Asp	Leu	Pro
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Ser	Gly	Pro	Ala	Arg	Ile	Pro	Val	Leu	Pro	Cys	Ser	Pro	Gln	Leu	Pro
			20					25					30		
Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
			35				40					45			
His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
	50					55				60					
Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
65				70					75					80	
Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
			85					90					95		
Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
			100					105					110		
Leu	Lys	Leu													
			115												

&lt;210&gt; 3461

&lt;211&gt; 474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3461

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 474

<210> 3462

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3462

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Leu	Leu	Gly	Gly	His	Trp	Leu	Arg	Ala	Gln	Gly	Tyr	Ala	Asn	Pro	Phe
		20						25					30		
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
		35					40					45			
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
	50					55					60				
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70				75					80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
				85					90					95	
Val	Ile	Thr	Val	His											
				100											

<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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 1734

&lt;210&gt; 3464

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3464

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 20 25 30  
 Glu Leu Pro Glu Arg Arg Arg Arg Gln Gln Arg Gln Gly Lys His His

35 40 45  
 Pro Asn Tyr Leu Met Ala Asn Glu Arg Met Asn Leu Met Asn Met Ala  
 50 55 60  
 Lys Leu Ser Ile Lys Gly Leu Ile Glu Ser Ala Leu Asn Leu Gly Arg  
 65 70 75 80  
 Thr Leu Asp Ser Asp Tyr Ala Pro Leu Gln Gln Phe Phe Val Val Met  
 85 90 95  
 Glu His Cys Leu Lys His Gly Leu Lys Ala Lys Lys Thr Phe Leu Gly  
 100 105 110  
 Gln Asn Lys Ser Phe Trp Gly Pro Leu Glu Leu Val Glu Lys Leu Val  
 115 120 125  
 Pro Glu Ala Ala Glu Ile Thr Ala Ser Val Lys Asp Leu Pro Gly Leu  
 130 135 140  
 Lys Thr Pro Val Gly Arg Gly Arg Ala Trp Leu Arg Leu Ala Leu Met  
 145 150 155 160  
 Gln Lys Lys Leu Ser Glu Tyr Met Lys Ala Leu Ile Asn Lys Lys Glu  
 165 170 175  
 Leu Leu Ser Glu Phe Tyr Glu Pro Asn Ala Leu Met Met Glu Glu Glu  
 180 185 190  
 Gly Ala Ile Ile Ala Gly Leu Leu Val Gly Leu Asn Val Ile Asp Ala  
 195 200 205  
 Asn Phe Cys Met Lys Gly Glu Asp Leu Asp Ser Gln Val Gly Val Ile  
 210 215 220  
 Asp Phe Ser Met Tyr Leu Lys Asp Gly Asn Ser Ser Lys Gly Thr Glu  
 225 230 235 240  
 Gly Asp Gly Gln Ile Thr Ala Ile Leu Asp Gln Lys Asn Tyr Val Glu  
 245 250 255  
 Glu Leu Asn Arg His Leu Asn Ala Thr Val Asn Asn Leu Gln Ala Lys  
 260 265 270  
 Val Asp Ala Leu Glu Lys Ser Asn Thr Lys Leu Thr Glu Glu Leu Ala  
 275 280 285  
 Val Ala Asn Asn Arg Ile Ile Thr Leu Gln Glu Glu Met Glu Arg Val  
 290 295 300  
 Lys Glu Glu Ser Ser Tyr Ile Leu Glu Ser Asn Arg Lys Gly Pro Lys  
 305 310 315 320  
 Gln Asp Arg Thr Ala Glu Gly Gln Ala Leu Ser Glu Ala Arg Lys His  
 325 330 335  
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 340 345 350  
 Met Gln Ile Ser Met Arg Gln Glu Met Glu Leu Ala Met Lys Met Leu  
 355 360 365  
 Glu Lys Asp Val Cys Glu Lys Gln Asp Ala Leu Val Ser Leu Arg Gln  
 370 375 380  
 Gln Leu Asp Asp Leu Arg Ala Leu Lys His Glu Leu Ala Phe Lys Leu  
 385 390 395 400  
 Gln Ser Ser Asp Leu Gly Val Lys Gln Lys Ser Glu Leu Asn Ser Arg  
 405 410 415  
 Leu Glu Glu Lys Thr Asn Gln Met Ala Ala Thr Ile Lys Gln Leu Glu  
 420 425 430  
 Gln Arg

&lt;210&gt; 3465

&lt;211&gt; 2904



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3465

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120  
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2904

&lt;210&gt; 3466

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3466

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Ala Leu Ile Arg Ser Pro Ser Leu Ala Lys Gln Ser Trp Gly Gly Gly
          20           25           30
Gly Arg His Arg Lys Leu Pro Glu Asn Trp Thr Asp Thr Arg Glu Thr
          35           40           45
Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
          50           55           60
Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
65           70           75           80
Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
          85           90           95
Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
          100          105          110
Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
          115          120          125
Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
          130          135          140
Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
          145          150          155          160
Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
          165          170          175
Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
          180          185          190
Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
          195          200          205
Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
          210          215          220
Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
          225          230          235          240
Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
          245          250          255
Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
          260          265          270
Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
          275          280          285
His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
          290          295          300
Ser Gly Thr Glu Gln Asp Asp Leu Phe Ser Phe
          305          310          315

```

&lt;210&gt; 3467

&lt;211&gt; 638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3467

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120
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180

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 agccaaaact gaaagtcag taacccggac atgcacaaag gaggaaaatc ataactcgga  
 420  
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 600  
 acttctgtgt gccaacctgt cctccctaac ccgtcgac  
 638

&lt;210&gt; 3468

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3468

Met	Ser	Leu	Ser	Ser	Trp	Leu	His	Arg	Glu	Glu	Thr	Leu	Val	Pro	Ser
1				5					10					15	
Tyr	Asp	Phe	Pro	Pro	Leu	Cys	Met	Ser	Gly	Leu	His	Asp	Phe	Gln	Phe
			20					25					30		
Trp	Leu	Cys	Tyr	Thr	Ser	Cys	Tyr	Gln	Gln	Asn	Arg	Val	Ser	Leu	Gly
		35				40						45			
Gln	Ser	Cys	Gly	Tyr	Thr	Ser	Val	Ser	Gln	Asp	Phe	Leu	Cys	Gln	Arg
		50				55					60				
Ala	Val	Lys	Leu	Arg	Thr	Lys	Val	Ile	Lys	Ile	Gln	Leu	Tyr	Tyr	Trp
65					70					75				80	
Ile	Val	Leu	Asp	Cys	Phe	Ser	Ser								
					85										

&lt;210&gt; 3469

&lt;211&gt; 1710

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3469

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 ccgctgctgt gggccccggc tgcggtccgg gccggcccag atgaagacct tagccaccgg  
 120  
 aacaaagaac cgccggcgcc ggcccagcag ctgcagccgc agcctgtggc tgtgcagggc  
 180  
 cccgagccgg cccgggtcga gaaaatattt acaccagcag ctccagttca taccaataaa  
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 gaagatcctg ctacccaaac taatttgga tttatccatg catttgctgc tgccatatca  
 300  
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 360

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1710

&lt;210&gt; 3470

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3470

Ala Ala Ala Pro Gly Asn Gly Arg Ala Ser Ala Pro Arg Leu Leu Leu

1 5 10 15  
 Leu Phe Leu Val Pro Leu Leu Trp Ala Pro Ala Ala Val Arg Ala Gly  
 20 25 30  
 Pro Asp Glu Asp Leu Ser His Arg Asn Lys Glu Pro Pro Ala Pro Ala  
 35 40 45  
 Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala  
 50 55 60  
 Arg Val Glu Lys Ile Phe Thr Pro Ala Ala Pro Val His Thr Asn Lys  
 65 70 75 80  
 Glu Asp Pro Ala Thr Gln Thr Asn Leu Gly Phe Ile His Ala Phe Val  
 85 90 95  
 Ala Ala Ile Ser Val Ile Ile Val Ser Glu Leu Gly Asp Lys Thr Phe  
 100 105 110  
 Phe Ile Ala Ala Ile Met Ala Met Arg Tyr Asn Arg Leu Thr Val Leu  
 115 120 125  
 Ala Gly Ala Met Leu Ala Leu Gly Leu Met Thr Cys Leu Ser Val Leu  
 130 135 140  
 Phe Gly Tyr Ala Thr Thr Val Ile Pro Arg Val Tyr Thr Tyr Tyr Val  
 145 150 155 160  
 Ser Thr Val Leu Phe Ala Ile Phe Gly Ile Arg Met Leu Arg Glu Gly  
 165 170 175  
 Leu Lys Met Ser Pro Asp Glu Gly Gln Glu Glu Leu Glu Glu Val Gln  
 180 185 190  
 Ala Glu Leu Lys Lys Lys Asp Glu Glu Phe Gln Arg Thr Lys Leu Leu  
 195 200 205  
 Asn Gly Pro Gly Asp Val Glu Thr Gly Thr Ser Ile Thr Val Pro Gln  
 210 215 220  
 Lys Lys Trp Leu His Phe Ile Ser Pro Ile Phe Val Gln Ala Leu Thr  
 225 230 235 240  
 Leu Thr Phe Leu Ala Glu Trp Gly Asp Arg Ser Gln Leu Thr Thr Ile  
 245 250 255  
 Val Leu Ala Ala Arg Glu Asp Pro Tyr Gly Val Ala Val Gly Gly Thr  
 260 265 270  
 Val Gly His Cys Leu Cys Thr Gly Leu Ala Val Ile Gly Gly Arg Met  
 275 280 285  
 Ile Ala Gln Lys Ile Ser Val Arg Thr Val Thr Ile Ile Gly Gly Ile  
 290 295 300  
 Val Phe Leu Ala Phe Ala Phe Ser Ala Leu Phe Ile Ser Pro Asp Ser  
 305 310 315 320  
 Gly Phe

&lt;210&gt; 3471

&lt;211&gt; 2335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3471

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 120  
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240  
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300  
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<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

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Val	Val	Ala	Thr	Ala	Asp	Gly	Ser	Ser	Ala	Ser	Pro	Val	Gln	Phe	Tyr
			20					25					30		
Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
	35					40						45			
Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
	50					55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
65					70					75				80	
Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val
			85						90					95	
Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
			100					105					110		
Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
	115					120						125			
Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
	130					135					140				
Ala	Leu	Pro	Lys	Leu	Pro	Ile	Ser	Leu	Thr	Asn	Thr	Asp	Leu	Lys	Val
145					150					155				160	
Ala	Ser	Asp	Thr	Gln	Phe	Tyr	Pro	Gly	Leu	Gly	Leu	Ala	Leu	Ala	Phe
			165						170					175	
His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
	180							185					190		
Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
	195						200					205			
Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
210						215						220			
Gln	Leu	Ser	Trp	Thr	Ser	Leu	Ala	Leu	Val	Gly	Ile	Asp	Ser	His	Gly



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225          230          235          240
Lys Leu Ser Val Leu Arg Leu Ser Pro Ser Met Gly His Pro Leu Glu
          245          250          255
Val Gly Leu Ala Leu Arg His Leu Leu Phe Leu Leu Glu Tyr Cys Met
          260          265          270
Val Thr Gly Tyr Asp Trp Trp Asp Ile Leu Leu His Val Gln Pro Ser
          275          280          285
Met Val Gln Ser Leu Val Glu Lys Leu His Glu Glu Tyr Thr Arg Gln
          290          295          300
Thr Ala Ala Leu Gln Gln Val Leu Ser Thr Arg Ile Leu Ala Met Lys
305          310          315          320
Ala Ser Leu Cys Lys Leu Ser Pro Cys Thr Val Thr Arg Val Cys Asp
          325          330          335
Tyr His Thr Lys Leu Phe Leu Ile Ala Ile Ser Ser Thr Leu Lys Ser
          340          345          350
Leu Leu Arg Pro His Phe Leu Asn Thr Pro Asp Lys Ser Pro Gly Asp
          355          360          365
Arg Leu Thr Glu Ile Cys Thr Lys Ile Thr Asp Val Asp Ile Asp Lys
          370          375          380
Val Met Ile Asn Leu Lys Thr Glu Glu Phe Val Leu Asp Met Asn Thr
385          390          395          400
Leu Gln Ala Leu Gln Gln Leu Leu Gln Trp Val Gly Asp Phe Val Leu
          405          410          415
Tyr Leu Leu Ala Ser Leu Pro Asn Gln Gly Ser Leu Leu Arg Pro Gly
          420          425          430
His Ser Phe Leu Arg Asp Gly Thr Ser Leu Gly Met Leu Arg Glu Leu
          435          440          445
Met Val Val Ile Arg Ile Trp Gly Leu Leu Lys Pro Ser Cys Leu Pro
          450          455          460
Val Tyr Thr Ala Thr Ser Asp Thr Gln Asp Ser Met Ser Leu Leu Phe
465          470          475          480
Arg Leu Leu Thr Lys Leu Trp Ile Cys Cys Arg Asp Glu Gly Pro Ala
          485          490          495
Ser Glu Pro Asp Glu Ala Leu Val Asp Glu Cys Cys Leu Leu Pro Ser
          500          505          510
Gln Leu Leu Ile Pro Ser Leu Asp Trp Leu Pro Ala Ser Asp Gly Leu
          515          520          525
Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe Gly Arg
          530          535          540
Ala Pro Thr Leu Pro Gly Ser Ala Ala Thr Leu Gln Leu Asp Gly Leu
545          550          555          560
Ala Arg Ala Pro Gly Gln Pro Lys Ile Asp His Leu Arg Arg Leu His
          565          570          575
Leu Gly Ala Cys Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg Cys Gly
          580          585          590
Cys Val Thr Met Leu Lys Ser Pro Asn Arg Thr Thr Ala Val Lys Gln
          595          600          605
Trp Glu Gln Arg Trp Ile Lys Asn Cys Leu Cys Gly Gly Leu Trp Trp
          610          615          620
Arg Val Pro Leu Ser Tyr Pro
625          630

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&lt;210&gt; 3473

&lt;211&gt; 1660

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3473

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ctggattttc acaaaggggt ctgaaccttg gctgttggcg agggcaaagt gggcgtggcg  
120  
gcgccatgcc cgggccggac tgagtgcgcg cgggcgagaa tggcgtacat ccagttggaa  
180  
ccattaaacg agggttttct ttctagaatc tctggtctgc tgctgtgcag atggacctgc  
240  
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300  
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360  
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420  
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480  
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600  
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660  
agcgacgatg tggactctct gacagacgag gagatcctgt ccaagtacca gctgggcatg  
720  
ctgcacttca gcactcagta cgacctgctg cacaaccacc tcaccgtgcg cgtgatcgag  
780  
gccaggggacc tgccacctcc catctcccac gatggctcgc gccaggacat ggcgcactcc  
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cgcacagccg tggagcagtg gcatagcctg aggtcccgag ctgagtgtga ccgcgtgtct  
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 1660

<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

Met	Ala	Tyr	Ile	Gln	Leu	Glu	Pro	Leu	Asn	Glu	Gly	Phe	Leu	Ser	Arg
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Ile	Ser	Gly	Leu	Leu	Leu	Cys	Arg	Trp	Thr	Cys	Arg	His	Cys	Cys	Gln
		20						25					30		
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu
		35					40					45			
Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser
	50					55					60				
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val
65					70					75				80	
Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser
				85					90					95	
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu
			100					105					110		
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu
		115					120					125			
Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu
	130					135					140				
Arg	Arg	Thr	Tyr	Asn	Pro	Asp	Asp	Tyr	Phe	Arg	Lys	Phe	Glu	Pro	His
145					150					155				160	
Leu	Tyr	Ser	Leu	Asp	Ser	Asn	Ser	Asp	Asp	Val	Asp	Ser	Leu	Thr	Asp
				165				170						175	
Glu	Glu	Ile	Leu	Ser	Lys	Tyr	Gln	Leu	Gly	Met	Leu	His	Phe	Ser	Thr
			180					185					190		
Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala
		195					200					205			
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met
	210					215					220				
Ala	His	Ser	Asn	Pro	Tyr	Val	Lys	Ile	Cys	Leu	Leu	Pro	Asp	Gln	Lys
225					230					235				240	
Asn	Ser	Lys	Gln	Thr	Gly	Val	Lys	Arg	Lys	Thr	Gln	Lys	Pro	Val	Phe
			245					250						255	
Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	Arg
			260					265					270		
Thr	Leu	Leu	Leu	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	Cys
			275				280					285			
Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	Lys
		290				295					300				
Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Ser	Gln	Asn	Glu	Val
305					310					315				320	
Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly

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          325          330          335
Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr Asp
          340          345          350
Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His Gly
          355          360          365
Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr Ile
          370          375          380
Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu Glu
385          390          395          400
Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met Lys
          405          410          415
Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser
          420          425          430
Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg
          435          440          445
Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys Asp
          450          455          460
Arg Val Ser Pro Ala Ser Leu Glu Val Thr
465          470

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&lt;210&gt; 3475

&lt;211&gt; 514

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3475

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514

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&lt;210&gt; 3476

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3476

```

Thr Arg Leu Glu Gly Trp Phe Phe Cys Thr Pro Ala Arg Lys Leu Leu
1          5          10          15
Trp Leu Val Leu Gln Pro Phe Phe Tyr Ser Leu Arg Pro Leu Cys Val

```

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                20                25                30
His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln
      35                40                45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
      50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
      65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
      85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
      100                105                110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
      115                120                125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
      130                135                140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
      145                150                155                160
Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
      165                170

```

&lt;210&gt; 3477

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3477

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120
gtggcctttg actttgtgtc ccgagagatg gctccaaata tggcagagtg ggaccagaag
180
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240
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300
tgagaatacc ggtagtggat gatttttctc agaaggcatc ctgatcatct tgtaca
356

```

&lt;210&gt; 3478

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3478

```

Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser
1      5      10      15
Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
      20      25      30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
      35      40      45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
      50      55      60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

```

```

65          70          75          80
Phe Leu Leu Phe Ile Lys Ser His Gly Arg Val Asp Ala Gly Gly Gln
          85          90          95
Ala Pro Val Ala Gly Leu Asp Glu Asp Pro Glu Thr Ala Gly Gln Ala
          100          105          110
Ala Glu Ala Arg
          115

```

<210> 3479  
 <211> 797  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3479
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60
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120
gagtatctca tgtacctcaa caccgaggct gggagaacct gcaatgacta catgcagtac
180
ccagtgttcc cctgggtcct cgcagactac acctcagaga cattgaactt ggcaaatccg
240
aagattttcc gggatctttc aaagcccatg ggggctcaga ccaaggaaag gaagctgaaa
300
tttatccaga ggtttaaaga agttgagaaa actgaaggag acatgactgc ccagtgccac
360
tactacaccc actactcttc ggccatcatc gtggcctcct acctgggtccg gatgccaccc
420
ttcaccagg ctttctgcgc tctgcagggt agctgctgcc actctctgta cacacacaca
480
cacacacaca cacacacata cgctgtatc acaagactaa gacctgtgct tgaacaaaga
540
caggatgcct ctgctaaaaa cttagtcatt agccagtgat tcccagttga cattgggtcc
600
aggattctgg ctcaccagcc aaggcaggct gttcttctc agttacacct gcacatctgc
660
ccaacaaagt cttgcaaaat gattctaaaa aataagaaat gagacatgaa aaaaatgatt
720
taacataaat aagatttagt ggaaaaagaa aaagcaggaa acttggagac tagaaaggca
780
ggcgggtcaag gattaga
797

```

<210> 3480  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3480
Xaa Phe Gln Pro Ser Leu Lys Gly Lys Ala Thr Ser Glu Asp Thr Leu
1          5          10          15
Asn Leu Arg Arg Tyr Pro Gly Ser Asp Arg Ile Met Leu Gln Lys Trp
          20          25          30
Gln Lys Arg Asp Ile Ser Asn Phe Glu Tyr Leu Met Tyr Leu Asn Thr

```

	35						40					45						
Ala	Ala	Gly	Arg	Thr	Cys	Asn	Asp	Tyr	Met	Gln	Tyr	Pro	Val	Phe	Pro			
	50					55					60							
Trp	Val	Leu	Ala	Asp	Tyr	Thr	Ser	Glu	Thr	Leu	Asn	Leu	Ala	Asn	Pro			
65					70					75					80			
Lys	Ile	Phe	Arg	Asp	Leu	Ser	Lys	Pro	Met	Gly	Ala	Gln	Thr	Lys	Glu			
				85					90					95				
Arg	Lys	Leu	Lys	Phe	Ile	Gln	Arg	Phe	Lys	Glu	Val	Glu	Lys	Thr	Glu			
			100					105					110					
Gly	Asp	Met	Thr	Ala	Gln	Cys	His	Tyr	Tyr	Thr	His	Tyr	Ser	Ser	Ala			
		115					120					125						
Ile	Ile	Val	Ala	Ser	Tyr	Leu	Val	Arg	Met	Pro	Pro	Phe	Thr	Gln	Ala			
	130					135				140								
Phe	Cys	Ala	Leu	Gln	Val	Ser	Cys	Cys	His	Ser	Leu	Tyr	Thr	His	Thr			
145					150					155					160			
His	Thr	His	Thr	His	Thr	Tyr	Ala	Cys	Ile	Thr	Arg	Leu	Arg	Pro	Val			
				165					170					175				
Leu	Glu	Gln	Arg	Gln	Asp	Ala	Ser	Ala	Lys	Asn	Leu	Val	Ile	Ser	Gln			
			180					185					190					

<210> 3481

<211> 1794

<212> DNA

<213> Homo sapiens

<400> 3481

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180	atgaggtcct	gaccagaggg	tcttctgcca	atgcctccaa	gtggtcacca	cctcagctct
240	gcagaccctg	cggtgctggg	agccaccatg	gagagtaggt	gctacggctg	cgctgtcaag
300	ttcacctct	tcaagaagga	gtacggctgt	aagaattgtg	gcaggngctt	ctgttcaggc
360	tgctaagct	tcagtgcagc	agtgcctcgg	actgggaaca	ccaacagaa	agtctgcaag
420	caatgccatg	aggtcctgac	cagaggggtct	tctgccaatg	cctccaagtg	gtcaccacct
480	cagaactata	agaagcgtgt	ggcagccttg	gaagccaagc	aaaagcccag	cacttcccag
540	agccaggggac	tgacacgaca	agaccagatg	attgctgagc	gcctagcacg	actccgccag
600	gagaacaagc	ccaagttagt	cccctcacag	gcagagatag	aggcacggct	ggctgccta
660	aaggatgaac	gtcaggggtt	catcccttcc	accagggaaa	tggaggcacg	acttgcacgc
720	ttgcagggca	gagttctacc	ttctcaaacc	cccagcccg	gcacatcaca	caccggacac
780	caggacccaa	gcccagcaga	cacaggatct	gctaacgcag	ctggcagctg	aggtggctat
840	cgatgaaagc	tggaaaggag	gaggcccagc	tgctctctc	cagaatgatc	tcaaccaggg

tggcccaggg agcactaatt ccaagaggca ggccacttgg ttcttggaga aggagaagag  
 900  
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 960  
 tctggccctg gccaaagcag tagccatgct gcggggacag gaccccgaga gactgaccct  
 1020  
 ccaggactat cgcctcccag acagtgatga cgacgaggat gaggagacag ccatccaaag  
 1080  
 agtcctgcag cagctcactg aagaagcttc cctggatgag gcaagtggct ttaacatccc  
 1140  
 tgcagagcag gcttctcgac cctggacgca accccgcggg gcagagcctg aggcccagga  
 1200  
 tgtggacccc aggctgagg ctgaggaaga ggagctcccc tgggtctgca tctgcaatga  
 1260  
 ggatgccacc ctacgctgag ctggctgaga tggggacctc ttctgtgccc gctgcttccg  
 1320  
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 1380  
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 1440  
 ggcacccatt tctgggcccc gccacaggac gtccgatggg agagcttgct tggctctact  
 1500  
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 1560  
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 1620  
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 1680  
 ctagggcaca ggccccctcc ctggcactta gtgggtctaa taaagtatgt tgattcattg  
 1740  
 ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa  
 1794

&lt;210&gt; 3482

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
1				5				10						15	
Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35					40					45			
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
		50					55				60				
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
					70					75				80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
				85					90					95	
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu



```

      115              120              125
Arg  Gln  Glu  Asn  Lys  Pro  Lys  Leu  Val  Pro  Ser  Gln  Ala  Glu  Ile  Glu
      130              135              140
Ala  Arg  Leu  Ala  Ala  Leu  Lys  Asp  Glu  Arg  Gln  Gly  Ser  Ile  Pro  Ser
145              150              155              160
Thr  Gln  Glu  Met  Glu  Ala  Arg  Leu  Ala  Ala  Leu  Gln  Gly  Arg  Val  Leu
      165              170              175
Pro  Ser  Gln  Thr  Pro  Gln  Pro  Gly  Thr  Ser  His  Thr  Gly  His  Gln  Asp
      180              185              190
Pro  Ser  Pro  Ala  Asp  Thr  Gly  Ser  Ala  Asn  Ala  Ala  Gly  Ser
      195              200              205

```

&lt;210&gt; 3483

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3483

```

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gacttcgagt  gggctctacac  cgaccagccg  cacacgcagc  ggcgcaagga  gatactggcc
120
aagtaccggg  ccatcaaggc  cctgatgcgg  ccagaccggc  gcctcaagtg  ggcggggctg
180
gtgctggtgc  tgggtcagat  gctggcctgc  tggctggtgc  gcgggctggc  ctggcgctgg
240
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300
cacgacatct  cgcacaacgc  ggccttcggc  acggggccgtg  cggcacgcaa  ccgctggctg
360
gccgtgttcg  ccaacctgcc  cgtgggtgtg  ccctacgccg  cctccttcaa  gaagtaccac
420
gtggaccacc  accgtacct  gggcggcgac  ggactggacg  tggacgtgcc  cacgcgt
477

```

&lt;210&gt; 3484

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3484

```

Met  Gly  Asn  Ser  Ala  Ser  Arg  Asn  Asp  Phe  Glu  Trp  Val  Tyr  Thr  Asp
1      5      10      15
Gln  Pro  His  Thr  Gln  Arg  Arg  Lys  Glu  Ile  Leu  Ala  Lys  Tyr  Pro  Ala
      20      25      30
Ile  Lys  Ala  Leu  Met  Arg  Pro  Asp  Pro  Arg  Leu  Lys  Trp  Ala  Gly  Leu
      35      40      45
Val  Leu  Val  Leu  Val  Gln  Met  Leu  Ala  Cys  Trp  Leu  Val  Arg  Gly  Leu
      50      55      60
Ala  Trp  Arg  Trp  Leu  Leu  Phe  Trp  Ala  Tyr  Ala  Phe  Gly  Gly  Cys  Val
65      70      75      80
Asn  His  Ser  Leu  Thr  Leu  Ala  Ile  His  Asp  Ile  Ser  His  Asn  Ala  Ala
      85      90      95
Phe  Gly  Thr  Gly  Arg  Ala  Ala  Arg  Asn  Arg  Trp  Leu  Ala  Val  Phe  Ala

```

```

          100          105          110
Asn Leu Pro Val Gly Val Pro Tyr Ala Ala Ser Phe Lys Lys Tyr His
          115          120          125
Val Asp His His Arg Tyr Leu Gly Gly Asp Gly Leu Asp Val Asp Val
          130          135          140
Pro Thr Arg
145

```

<210> 3485  
 <211> 812  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3485
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tgcattgctta aaacatttta ttttctatta tacagttaaa catttgcttg aattcagtga
120
gtctaaaaaaa tcttattgtt ctcaggtag cagttagttg agcagagtcc attggtgaag
180
caatctagtt attggcaaatt tctaacacat ggtaaggtgt gggggaaagg atttaaaata
240
acagaaaaaat gtaagtacaa acatacataa cagcaaaaata aaactcactt taacaaaaat
300
ttatttaaaa tgttaccccc atatttcctc aatgaccaac ttgtttcagt tttatctccc
360
cctcatccgg ttattttatg tctttttggg aggaagggag atgaggggtt ttgtttttta
420
acaaaatcac tggcttttta aaaagtgtta ctgcagtcac ttataagatg catgttatgt
480
ggaagtgata cctgagttgt ttgcatgggc aatggaagag gcagcagctc tgaaaggagt
540
atgagtccag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac
600
attaaagacc aagtattatt ggccagagtc tcttctgaga ttgtgagttt ttcattaact
660
ccttgtgtaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcataccta
720
tccaaacgac ctgagagggg gatagagcac aggagcatat gtaaagtaac aagcgctgaa
780
ggaacacgca tgtccttaaa ctcaaaggat cc
812

```

<210> 3486  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3486
Met Arg Val Pro Ser Ala Leu Val Thr Leu His Met Leu Leu Cys Ser
1          5          10          15
Ile Pro Leu Ser Gly Arg Leu Asp Ser Asp Glu Gln Lys Ile Gln Asn
          20          25          30
Asp Ile Ile Asp Ile Leu Leu Thr Phe Thr Gln Gly Val Asn Glu Lys

```

```

      35              40              45
Leu Thr Ile Ser Glu Glu Thr Leu Ala Asn Asn Thr Trp Ser Leu Met
      50              55              60
Leu Lys Glu Val Leu Ser Ser Ile Leu Lys Val Pro Glu Gly Phe Phe
65              70              75              80
Ser Gly Leu Ile Leu Leu Ser Glu Leu Leu Pro Leu Pro Leu Pro Met
      85              90              95
Gln Thr Thr Gln Val Ser Leu Pro His Asn Met His Leu Ile Asn Asp
      100              105              110
Cys Ser Asn Thr Phe
      115

```

&lt;210&gt; 3487

&lt;211&gt; 772

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3487

```

nnattgtatc aaaatcctag atttgaataa cttattatct taaataatca gtaactaaaa
60
ccaagcaatc catcacacaa agaggggaaa gggtaatatt ctgagttata aattttttac
120
cctgtctgat aaaaatagaa gcctgaaagt ttaaattttt cctggattta aatttaaaga
180
taaatttggt tttcagtgaa ataccctcaa tagcaatttt accaaagagg cttctctctg
240
aaggccacct ctgaaataat tagaggataa atgtcaatgg catgatatta agatattact
300
tggccaggcg tggtcgtcac gcgtgtaatc ccagcacttt gggaggccga ggcaggtgga
360
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420
agcttcttga caccttttaa tccagtcact gaaattagca tctgcaccta gaaagaaaaa
480
actgactata acatcactca tctgcacaac ctattaatca gcaaatactt actgaatacc
540
tactacatcc caggcagtggt tctaggcact ggggagtcgg cagcgaacaa aacctgtctt
600
aacagacctt atcaccaact ctactatagt tataaacata ccaatagttt aacatttagt
660
tgttaatcat gaaacatttt gattttttta aaattttaac tacagtcaac ctttaatttca
720
cagatacaaa taatctgcat ttcccccaat cccgctgctc ttagagaagc tt
772

```

&lt;210&gt; 3488

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3488

```

Asp Ile Thr Trp Pro Gly Val Val Val Thr Arg Val Ile Pro Ala Leu
1              5              10              15
Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu Ile Glu Thr Ser

```



tcgcttctgc tgacggccac agacgatggt gccatcaggg tctggaagaa ttttgctgat  
 240  
 ttggaaaaga acccagagat ggtgaccgcg tggcaggggc tctcggacat gctgccaacg  
 300  
 acgcgaggag ctgggatggt ggtggactgg gagcaggaga ccggcctcct catgagctca  
 360  
 ggagacgtgc ggatcgtccg gatctgggac acagaccgtg agatgaaggt gcaggacatc  
 420  
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 480  
 gtggctggcc tcggtgacgg ctccatccgc gtctacgaca gaaggatggc actcagcgaa  
 540  
 tgccgcgtca tgacgtaccg ggagcaca  
 568

&lt;210&gt; 3492

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3492

Gly	Asn	Arg	Arg	Pro	Ser	Val	Val	Lys	Phe	His	Pro	Phe	Thr	Pro	Cys
1				5					10					15	
Ile	Ala	Val	Ala	Asp	Lys	Asp	Ser	Ile	Cys	Phe	Trp	Asp	Trp	Glu	Lys
			20					25					30		
Gly	Glu	Lys	Leu	Asp	Tyr	Phe	His	Asn	Gly	Asn	Pro	Arg	Tyr	Thr	Arg
		35					40					45			
Val	Thr	Ala	Met	Glu	Tyr	Leu	Asn	Gly	Gln	Asp	Cys	Ser	Leu	Leu	Leu
	50					55					60				
Thr	Ala	Thr	Asp	Asp	Gly	Ala	Ile	Arg	Val	Trp	Lys	Asn	Phe	Ala	Asp
65					70					75				80	
Leu	Glu	Lys	Asn	Pro	Glu	Met	Val	Thr	Ala	Trp	Gln	Gly	Leu	Ser	Asp
			85						90					95	
Met	Leu	Pro	Thr	Thr	Arg	Gly	Ala	Gly	Met	Val	Val	Asp	Trp	Glu	Gln
			100					105					110		
Glu	Thr	Gly	Leu	Leu	Met	Ser	Ser	Gly	Asp	Val	Arg	Ile	Val	Arg	Ile
		115					120					125			
Trp	Asp	Thr	Asp	Arg	Glu	Met	Lys	Val	Gln	Asp	Ile	Pro	Thr	Gly	Ala
	130					135					140				
Asp	Ser	Cys	Val	Thr	Ser	Leu	Ser	Cys	Asp	Ser	His	Arg	Ser	Leu	Ile
145					150					155				160	
Val	Ala	Gly	Leu	Gly	Asp	Gly	Ser	Ile	Arg	Val	Tyr	Asp	Arg	Arg	Met
			165					170						175	
Ala	Leu	Ser	Glu	Cys	Arg	Val	Met	Thr	Tyr	Arg	Glu	His			
			180					185							

&lt;210&gt; 3493

&lt;211&gt; 2244

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3493

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 60

aaggaactgt ttggagatga cagtgaggac gagggagctt cacatcatag tggtagtgat  
120  
aatcactctg aaagatcaga caatagatca gaagcttctg agcgttctga ccatgaggac  
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aatgaccctt cagatgtaga tcagcacagt ggatcagaag cccctaata tgaatgaagac  
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300  
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360  
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420  
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540  
gcttctgata atgatgatga gaaacagaat tctgatgatg aagaacaacc acagctgtct  
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gatgaagaga aaatgcaaaa ttctgatgat gaaaggccac agggcccaga tgaagaacac  
660  
aggcattcag atgatgaaga ggaacaggat cataaatcag aatccgcaag aggcagtgat  
720  
agtgaagatg aagttttacg aatgaaacgc aagaatgcga ttgcatctga ttcagaagcg  
780  
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840  
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960  
gaagtagaaa tacccaaagt aaacactgat ttaggaaacg acttatattt tgttaaactg  
1020  
cccaactttc tcagtgtaga gccagacct tttgatcctc agtattatga agatgaattt  
1080  
gaagatgaag aaatgctgga tgaagaagg agaacagggt taaaattaaa ggtagaaaat  
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1620  
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1680

cgagaggaac gagccagaat ctattcatca gacagtgatg agggatcaga agaagataaa  
 1740  
 gctcaaagat tactcaaagc aaagaaactt accagtgatg aggaaggtga accttccgga  
 1800  
 aagagaaaag cagaagatga tgataaaagca aataaaaagc ataagaagta tgtgatcagc  
 1860  
 gatgaagagg aagaagatga tgattgaagt atgaaatatg aaaacatttt atatatttta  
 1920  
 ttgtacagtt ataaatatgt aaacatgagt tattttgatt gaaatgaatc gatttgcttt  
 1980  
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 2244

&lt;210&gt; 3494

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3494

Xaa	Gly	Gly	Tyr	Pro	Cys	Ser	Asp	Gln	Asp	Glu	Arg	Gly	Asp	Ser	Gly
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Gln	Pro	Ser	Asn	Lys	Glu	Leu	Phe	Gly	Asp	Asp	Ser	Glu	Asp	Glu	Gly
			20					25					30		
Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn
		35				40						45			
Arg	Ser	Glu	Ala	Ser	Glu	Arg	Ser	Asp	His	Glu	Asp	Asn	Asp	Pro	Ser
	50					55					60				
Asp	Val	Asp	Gln	His	Ser	Gly	Ser	Glu	Ala	Pro	Asn	Asp	Asp	Glu	Asp
65				70					75					80	
Glu	Gly	His	Arg	Ser	Asp	Gly	Gly	Ser	His	His	Ser	Glu	Ala	Glu	Gly
			85					90						95	
Ser	Glu	Lys	Ala	His	Ser	Asp	Asp	Glu	Lys	Trp	Gly	Arg	Glu	Asp	Lys
		100						105					110		
Ser	Asp	Gln	Ser	Asp	Asp	Glu	Lys	Ile	Gln	Asn	Ser	Asp	Asp	Glu	Glu
	115					120						125			
Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp
	130					135					140				
Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp
145				150						155				160	
Asp	Glu	Arg	Gln	Gln	Leu	Ser	Glu	Glu	Glu	Lys	Ala	Asn	Ser	Asp	Asp
			165					170						175	
Glu	Arg	Pro	Val	Ala	Ser	Asp	Asn	Asp	Asp	Glu	Lys	Gln	Asn	Ser	Asp
		180						185					190		
Asp	Glu	Glu	Gln	Pro	Gln	Leu	Ser	Asp	Glu	Glu	Lys	Met	Gln	Asn	Ser
	195					200						205			
Asp	Asp	Glu	Arg	Pro	Gln	Ala	Pro	Asp	Glu	Glu	His	Arg	His	Ser	Asp

210	215	220
Asp Glu Glu Glu Gln Asp His Lys Ser Glu Ser Ala Arg Gly Ser Asp		
225	230	235
Ser Glu Asp Glu Val Leu Arg Met Lys Arg Lys Asn Ala Ile Ala Ser		
245	250	255
Asp Ser Glu Ala Asp Ser Asp Thr Glu Val Pro Lys Asp Asn Ser Gly		
260	265	270
Thr Met Asp Leu Phe Gly Gly Ala Asp Asp Ile Ser Ser Gly Ser Asp		
275	280	285
Gly Glu Asp Lys Pro Pro Thr Pro Gly Gln Pro Val Asp Glu Asn Gly		
290	295	300
Leu Pro Gln Asp Gln Gln Glu Glu Glu Pro Ile Pro Glu Thr Arg Ile		
305	310	315
Glu Val Glu Ile Pro Lys Val Asn Thr Asp Leu Gly Asn Asp Leu Tyr		
325	330	335
Phe Val Lys Leu Pro Asn Phe Leu Ser Val Glu Pro Arg Pro Phe Asp		
340	345	350
Pro Gln Tyr Tyr Glu Asp Glu Phe Glu Asp Glu Glu Met Leu Asp Glu		
355	360	365
Glu Gly Arg Thr Arg Leu Lys Leu Lys Val Glu Asn Thr Ile Arg Trp		
370	375	380
Arg Ile Arg Arg Asp Glu Glu Gly Asn Glu Ile Lys Glu Ser Asn Ala		
385	390	395
Arg Ile Val Lys Trp Ser Asp Gly Ser Met Ser Leu His Leu Gly Asn		
405	410	415
Glu Val Phe Asp Val Tyr Lys Ala Pro Leu Gln Gly Asp His Asn His		
420	425	430
Leu Phe Ile Arg Gln Gly Thr Gly Leu Gln Gly Gln Ala Val Phe Lys		
435	440	445
Ala Lys Leu Thr Phe Arg Pro His Ser Thr Asp Ser Ala Thr His Arg		
450	455	460
Lys Met Thr Leu Ser Leu Ala Asp Arg Cys Ser Lys Thr Gln Lys Ile		
465	470	475
Arg Ile Leu Pro Met Ala Gly Arg Asp Pro Glu Cys Gln Arg Thr Glu		
485	490	495
Met Ile Lys Lys Glu Glu Glu Arg Leu Arg Ala Ser Ile Arg Arg Glu		
500	505	510
Ser Gln Gln Arg Arg Met Arg Glu Lys Gln His Gln Arg Gly Leu Ser		
515	520	525
Ala Ser Tyr Leu Glu Pro Asp Arg Tyr Asp Glu Glu Glu Glu Gly Glu		
530	535	540
Glu Ser Ile Ser Leu Ala Ala Ile Lys Asn Arg Tyr Lys Gly Gly Ile		
545	550	555
Arg Glu Glu Arg Ala Arg Ile Tyr Ser Ser Asp Ser Asp Glu Gly Ser		
565	570	575
Glu Glu Asp Lys Ala Gln Arg Leu Leu Lys Ala Lys Lys Leu Thr Ser		
580	585	590
Asp Glu Glu Gly Glu Pro Ser Gly Lys Arg Lys Ala Glu Asp Asp Asp		
595	600	605
Lys Ala Asn Lys Lys His Lys Lys Tyr Val Ile Ser Asp Glu Glu Glu		
610	615	620
Glu Asp Asp Asp		
625		



<210> 3495  
 <211> 1085  
 <212> DNA  
 <213> Homo sapiens

<400> 3495  
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 120  
 gcgtccccgg aggagatcaa gaaggcctat cggaagctgg cgctcaagta ccaccggag  
 180  
 aagaaccgg atgagggcga gaagtttaa ctcatatccc aggcatatga agtgctttca  
 240  
 gatccaaaga aaagggatgt ttatgaccaa ggcggagagc aggcaattaa agaaggaggc  
 300  
 tcaggcagcc ccagcttctc ttcacccatg gacatctttg acatgttctt tgggtggtgt  
 360  
 ggacggatgg ctagagagag aagaggcaag aatgtgttac accagttatc tgtaactctt  
 420  
 gaagatctat ataatggagt cacgaagaaa ttggccctcc agaaaaatgt aatttgtgag  
 480  
 aaatgtgaag gtgttggtgg gaagaaggga tcggtggaga agtgcccgt gtgcaagggg  
 540  
 cgggggatgc agatccacat ccagcagatc gggccgggca tggtagagca gatccagacc  
 600  
 gtgtgcatcg agtgcaaggg ccagggtgag cgcataacc ccaaggaccg ctgagagagc  
 660  
 tgcagcgggg ccaaggtgat ccgtgagaag aagattatcg aggtacatgt tgaaaaaggt  
 720  
 atgaaagatg ggcaaaagat actatttcat ggagaaggag atcaggagcc tgagctggag  
 780  
 cctggtgatg tcataattgt gcttgatcag aaggatcata gtgtctttca gagacgaggc  
 840  
 catgacttga tcatgaaaat gaaaattcag ctttctgaag ctctttgtgg cttcaagaag  
 900  
 acgataaaaa cattggacaa tcgaattctt gttattacat ccaaagcagg tgaggtgata  
 960  
 aagcacgggg acctgagatg cgtgcgcgat gaaggaatgc ccatctacaa agcaccctg  
 1020  
 gaaaaaggga ttctgatcat acagttttta gtaatctttc ctganaaaca ctggctttct  
 1080  
 ctgga  
 1085

<210> 3496  
 <211> 337  
 <212> PRT  
 <213> Homo sapiens

<400> 3496  
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 1 5 10 15  
 Ala Ser Pro Glu Glu Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu Lys

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120
tttttagtat atccttctaa aaagttttcc tgagaatttt tagtttggcc tctcaagttt
180
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ccttatttta ccttttctta aattacctcc ctccctcctt agtgaaatga gccttccttc  
240  
agcatacgca acttatacctt attgcttttt tcatacccaa ttttttggtt tatctctttc  
300  
agccaactgg gtcctgaagt agctgaaatg cgaaaaaggc agcagtccca aaatgaagga  
360  
acacctgctg tgtctcaagc tcctggaaac cagaggccca acaacacctg ttgcttttgt  
420  
tggtgctgtt gttgcagctg ctccctgcctc actgtgagga atgaagaaag aggggaaaat  
480  
gcgggaagac ccacacacac tacaaaaatg gagagtatcc aggtcctaga ggaatgccaa  
540  
aaccctactg cagaggaagt cttgtcctgg tctcaaaatt ttgacaagat gatgaaggcc  
600  
ccagcaggaa gaaacctttt cagagagttc ctccgaacag aatacagtga agagaacctt  
660  
cttttctggc ttgcttggtg agacttaag aaggagcaga acaaaaaagt aattgaagaa  
720  
aaggctagga tgatatatga agattacatt tctatactat caccaaaaga ggtcagtctt  
780  
gattctcgag ttagagaggt gatcaataga aatctgttg atcccaatcc tcacatgtat  
840 aacttcagat atatacttta atgcacagag attcttttcc aaggtttttg 900  
aactctcaaa tttataagtc atttggtgaa agtactgctg gctcttcttc tgaatcttaa  
960  
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1020  
catcagaaac tgagttcctg gagaactaca gtttagcatt cctcaggcta ctgtgaaaac  
1080  
acaaccgtta tggcttttgt ctccattttt atcaagggtt tccatgggta agtttgagga  
1140  
aaataccaca caaaacaatg aattgccaaa ttggttggtt tattcaagac tcattctact  
1200  
tgcaagcaaa gtgtatttgt agtcctatga acagtctcct cgtgtatctc cagagactgc  
1260  
atgtgcaaag taaatgctt catttgccac atagttgttg taatatttaa tccagtagca  
1320  
taacttatat ctgtatttaa ggacttttgt gcaatatggc cttagaaat aattgccaaa  
1380  
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1560  
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1620  
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1638

&lt;210&gt; 3498

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3498 .

Met Arg Lys Arg Gln Gln Ser Gln Asn Glu Gly Thr Pro Ala Val Ser  
 1 5 10 15  
 Gln Ala Pro Gly Asn Gln Arg Pro Asn Asn Thr Cys Cys Phe Cys Trp  
 20 25 30  
 Cys Cys Cys Cys Ser Cys Ser Cys Leu Thr Val Arg Asn Glu Glu Arg  
 35 40 45  
 Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile  
 50 55 60  
 Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser  
 65 70 75 80  
 Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn  
 85 90 95  
 Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu  
 100 105 110  
 Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val  
 115 120 125  
 Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu  
 130 135 140  
 Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn  
 145 150 155 160  
 Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu  
 165 170 175  
 Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn  
 180 185 190  
 Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser  
 195 200 205  
 Glu Ser  
 210

&lt;210&gt; 3499

&lt;211&gt; 732

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3499

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 gtccctgattc gtccctcacag ccctgacctg gcagaagctt cactcctgcc ccagccccc  
 120  
 tgccacgggc ggcgtcccag cctggcacag aggtattgtg attcccanaa tggccaagnc  
 180  
 aacagactcn aacctcagga tngttctatt ttcgcccaga agcaataatt tttttttcct  
 240  
 tctggaaagc cctttcaaga tagtgatgtt gatgtggggg cacggcggtc gccgggtaca  
 300  
 tggaggtacc ggggtcacag cagcgcaagc accgggaagc agggagcccc tggctctgac  
 360  
 tgggcctgta tttttcatgt tgttcttcag ccctctcggc atggtccgga ggcgacggca  
 420  
 gctcctcagt cccctccac tctgtctgtt cccctggac atggggcaca cgactcagga  
 480  
 ccaggccaga ggcaaaggca aggagcaggc agtacgccag caagagtccc tgtccacggg  
 540

agcccatctt cctgccgggc cctccgtccc gccggcgcct cctcccgcgc cgcccctaga  
 600  
 gcattctccg ccggccaagc ctctcccg ccanggtccg gggcgatgca cagactcggg  
 660  
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 720  
 gggggcggtta cg  
 732

<210> 3500  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<400> 3500  
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 Gly Ala Arg Arg Ser Pro Gly Thr Trp Arg Tyr Arg Gly His Ser Ser  
 20 25 30  
 Ala Ser Thr Gly Lys Gln Gly Ala Pro Gly Pro Asp Trp Ala Cys Ile  
 35 40 45  
 Phe His Val Val Leu Gln Pro Ser Arg His Gly Pro Glu Ala Thr Ala  
 50 55 60  
 Ala Pro Gln Ser Pro Pro Thr Pro Ala Val Pro Pro Gly His Gly Ala  
 65 70 75 80  
 His Asp Ser Gly Pro Gly Gln Arg Gln Arg Gln Gly Ala Gly Ser Thr  
 85 90 95  
 Pro Ala Arg Val Pro Val His Gly Ser Pro Ser Ser Cys Arg Ala Leu  
 100 105 110  
 Arg Pro Ala Gly Arg Ser Ser Arg Ala Ala Pro Arg Ala Ser Pro Ala  
 115 120 125  
 Gly Gln Ala Ser Ser Arg Pro Xaa Ser Gly Ala Met His Arg Leu Gly  
 130 135 140  
 Glu Gly Asn Arg Ala Gly Glu Lys Val Phe Arg Arg Thr Ala Val Gln  
 145 150 155 160  
 Lys Arg Arg Val Gly Gly Thr  
 165

<210> 3501  
 <211> 691  
 <212> DNA  
 <213> Homo sapiens

<400> 3501  
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 gaagagaaaa ctggccagag gccatctgaa gccaaagaga taaaacttta tgcccagatt  
 120  
 cccctatag agaagatgga tgcattcttg tccatgcttg ctaattgcga gaagctttca  
 180  
 ctgtctacaa actgcattga aaaaattgcc aacctgaatg gcttaaaaaa cttgaggata  
 240  
 ttatcttttag gaagaaacaa cataaagaac ttaaatggac tggaggcagt aggggacaca  
 300

ttagaagaac tgtggatctc ctacaatttt attgagaagt tgaaagggat ccacataatg  
 360  
 aagaaattga agattctcta catgtctaata aacctggtaa aagactgggc tgagtttggtg  
 420  
 aagctggcag aactgccatg cctcgaagac ctgggtgtttg taggcaatcc cttggaagag  
 480  
 aaacattctg ctgagaataa ctggattgaa gaagcaacca agagagtgcc caaactgaaa  
 540  
 aagctggatg gtactccagt aattaaaggg gatgaggaag aagacaacta atgccacgct  
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 ttccactgtg tggttaactta tttaaatgtc ataagaacaa tagataaatt ttatataatt  
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<210> 3502  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

<400> 3502  
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 20 25 30  
 Glu Ile Lys Leu Tyr Ala Gln Ile Pro Pro Ile Glu Lys Met Asp Ala  
 35 40 45  
 Ser Leu Ser Met Leu Ala Asn Cys Glu Lys Leu Ser Leu Ser Thr Asn  
 50 55 60  
 Cys Ile Glu Lys Ile Ala Asn Leu Asn Gly Leu Lys Asn Leu Arg Ile  
 65 70 75 80  
 Leu Ser Leu Gly Arg Asn Asn Ile Lys Asn Leu Asn Gly Leu Glu Ala  
 85 90 95  
 Val Gly Asp Thr Leu Glu Glu Leu Trp Ile Ser Tyr Asn Phe Ile Glu  
 100 105 110  
 Lys Leu Lys Gly Ile His Ile Met Lys Lys Leu Lys Ile Leu Tyr Met  
 115 120 125  
 Ser Asn Asn Leu Val Lys Asp Trp Ala Glu Phe Val Lys Leu Ala Glu  
 130 135 140  
 Leu Pro Cys Leu Glu Asp Leu Val Phe Val Gly Asn Pro Leu Glu Glu  
 145 150 155 160  
 Lys His Ser Ala Glu Asn Asn Trp Ile Glu Glu Ala Thr Lys Arg Val  
 165 170 175  
 Pro Lys Leu Lys Lys Leu Asp Gly Thr Pro Val Ile Lys Gly Asp Glu  
 180 185 190  
 Glu Glu Asp Asn  
 195

<210> 3503  
 <211> 857  
 <212> DNA  
 <213> Homo sapiens

<400> 3503

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 120  
 aatgcccaga gattagcgga gaagctccga gccagaaaac gggaacaaga cacaagaag  
 180  
 gagccgtgtt ccacaaacgc tgttcagcgg agagtgaag aaatagtgcg gttcacacgg  
 240  
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 300  
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 360  
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 420  
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 480  
 ttggcttggg acaaggacat ggcacatcaa gtccaagagt tgtttagaac ccgtcaggtg  
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 660  
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 720  
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 780  
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 840  
 ccaatccttg gtgatca  
 857

&lt;210&gt; 3504

&lt;211&gt; 285

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3504

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Gln	Gly	Cys	Gly	Ser	Leu	Phe	Thr	Leu	Val	Ser	Lys	Pro	Phe	Cys	Ala
		20						25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
		35				40						45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
	50				55					60					
Thr	Asn	Ala	Val	Gln	Arg	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg
65				70				75				80			
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
			85					90				95			
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
		100					105					110			
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
	115						120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

130	135	140	
Leu His Leu Cys His Arg	Leu Asp Lys Glu Thr Thr	Gly Val Met Val	
145	150	155	160
Leu Ala Trp Asp Lys Asp Met	Ala His Gln Val Gln Glu Leu Phe Arg		
165	170	175	
Thr Arg Gln Val Val Lys Lys Tyr Trp	Ala Ile Thr Val His Val Pro		
180	185	190	
Met Pro Ser Ala Gly Val Val Asp Ile Pro Ile Val Glu Lys Glu Gly			
195	200	205	
Gln Gly Gln Gln Gln His Pro Arg Met Thr Leu Ser Pro Ser Ser Arg			
210	215	220	
Met Asp Asp Gly Lys Met Val Lys Val Arg Arg Ser Arg Asn Ala Gln			
225	230	235	240
Val Ala Val Thr Gln Tyr Gln Val Leu Ser Ser Thr Leu Ser Ser Ala			
245	250	255	
Leu Val Glu Leu Gln Pro Ile Thr Gly Ile Lys His Gln Leu Arg Val			
260	265	270	
His Leu Ser Phe Gly Leu Asp Cys Pro Ile Leu Gly Asp			
275	280	285	

&lt;210&gt; 3505

&lt;211&gt; 1612

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3505

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 120  
 cttgtcgcat ccctgggctc tgcggagaag gaacccgagc agccccggc cctgtggagg  
 180  
 aagggttggtg acttctctgct gaaggccatc atgcgcacca tgtgggttcgc cggcggcttc  
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 caccgggttg ccgtgaaggg gcggcaggcg ctgcccaccg aggcggccat cctcacgctc  
 300  
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 360  
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 420  
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 480  
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 720  
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 780  
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 840



gactgccagc tggccctggc ggaaggacag ctccgtctcc ccgtgacac ttgcctttta  
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 960  
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 1020  
 gccgcctccc tggaagtccc cgtttctgac ttgctggaag acatgttttc actgttcgac  
 1080  
 gagagcggca gcggcgaggt ggacctgcga gagtgtgtgg ttgccctgtc tgtcgtctgc  
 1140  
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 1200  
 gacggcagcg tcggcgaagg tgacctgtcc tgcacacctca agacggccct ggggggtggca  
 1260  
 gagctcaactg tgaccgacct attccgagcc attgaccaag aggagaaggg gaagatcaca  
 1320  
 ttcgtgact tccacaggtt tgcagaaatg taccctgcct tcgcagagga atacctgtac  
 1380  
 ccggatcaga cacatttcga aagctgtgca gagacctcac ctgcgccaat cccaaacggc  
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 1612

&lt;210&gt; 3506

&lt;211&gt; 502

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3506

Val	His	Glu	Leu	His	Leu	Ser	Ala	Leu	Gln	Lys	Ala	Gln	Val	Ala	Leu
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Met	Thr	Leu	Thr	Leu	Phe	Pro	Val	Arg	Leu	Leu	Val	Ala	Ala	Ala	Met
				20				25					30		
Met	Leu	Leu	Ala	Trp	Pro	Leu	Ala	Leu	Val	Ala	Ser	Leu	Gly	Ser	Ala
				35			40					45			
Glu	Lys	Glu	Pro	Glu	Gln	Pro	Pro	Ala	Leu	Trp	Arg	Lys	Val	Val	Asp
				50		55					60				
Phe	Leu	Leu	Lys	Ala	Ile	Met	Arg	Thr	Met	Trp	Phe	Ala	Gly	Gly	Phe
65					70					75				80	
His	Arg	Val	Ala	Val	Lys	Gly	Arg	Gln	Ala	Leu	Pro	Thr	Glu	Ala	Ala
				85				90					95		
Ile	Leu	Thr	Leu	Ala	Pro	His	Ser	Ser	Tyr	Phe	Asp	Ala	Ile	Pro	Val
				100				105					110		
Thr	Met	Thr	Met	Ser	Ser	Ile	Val	Met	Lys	Thr	Glu	Ser	Arg	Asp	Ile
				115			120					125			
Pro	Ile	Trp	Gly	Thr	Leu	Ile	Gln	Tyr	Ile	Arg	Pro	Val	Phe	Val	Ser
				130		135				140					
Arg	Ser	Asp	Gln	Asp	Ser	Arg	Arg	Lys	Thr	Val	Glu	Glu	Ile	Lys	Arg
145					150					155				160	
Arg	Ala	Gln	Ser	Asn	Gly	Lys	Trp	Pro	Gln	Ile	Met	Ile	Phe	Pro	Glu

2668

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&lt;210&gt; 3508

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3508

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Arg	Arg	Leu	Leu	Cys	Glu	Val	Ala	Ile	Ala	Val	Tyr	Thr	Phe	Gly	Thr
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Cys	Ile	Ala	Phe	Leu	Ile	Ile	Ile	Gly	Asp	Gln	Gln	Asp	Lys	Ile	Ile
		35					40					45			
Ala	Val	Met	Ala	Lys	Glu	Pro	Glu	Gly	Ala	Ser	Gly	Pro	Trp	Tyr	Thr
	50					55					60				
Asp	Arg	Lys	Phe	Thr	Ile	Ser	Leu	Thr	Ala	Phe	Leu	Phe	Ile	Leu	Pro
65					70					75				80	
Leu	Ser	Ile	Pro	Arg	Glu	Ile	Gly	Phe	Gln	Lys	Tyr	Ala	Ser	Phe	Leu
			85					90						95	
Ser	Val	Val	Gly	Thr	Trp	Tyr	Val	Thr	Ala	Ile	Val	Ile	Ile	Lys	Tyr
		100						105					110		
Ile	Trp	Pro	Asp	Lys	Glu	Met	Thr	Pro	Gly	Asn	Ile	Leu	Thr	Arg	Pro
		115					120					125			
Ala	Ser	Trp	Met	Ala	Val	Phe	Asn	Ala	Met	Pro	Thr	Ile	Cys	Phe	Gly
	130					135					140				
Phe	Gln	Cys	His	Val	Ser	Val	Pro	Val	Phe	Asn	Ser	Met	Gln	Gln	
145				150					155				160		
Pro	Glu	Val	Lys	Thr	Trp	Gly	Gly	Val	Val	Thr	Ala	Ala	Met	Val	Ile

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 <213> Homo sapiens

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 35 40 45  
 Glu Gly Glu Leu Pro Thr His Glu Gln Val Phe Leu Ser Pro Pro Pro  
 50 55 60  
 Pro Leu Ser Pro Arg Gly Pro Gly Leu Pro Gln Lys Leu Glu Glu Arg  
 65 70 75 80  
 Arg Gln Leu Gly Lys Ala Pro Met Gly Gly Val Pro Trp Gly Ser Asp  
 85 90 95  
 Gly His Gln Arg Trp Gln Gly Val Pro His His Pro His Ala  
 100 105 110

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 <212> DNA  
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360  
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420  
tcaaaccatc tacaatatgt cagcttcaag gtggacagca gcaaggaatc agctgaagca  
480  
gcttgtgata tactatcgca acttgtgaat tgctctttaa aaacacttgg acttatttca  
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<210> 3512  
<211> 462  
<212> PRT  
<213> Homo sapiens

<400> 3512

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Ser	Arg	Met	Lys	Arg	Gly	Gly	Arg	Asp	Ser	Asp	Arg	Asn	Ser	Ser	Glu
		35					40					45			
Glu	Gly	Thr	Ala	Glu	Lys	Ser	Lys	Lys	Leu	Arg	Thr	Thr	Asn	Glu	His
		50				55					60				
Ser	Gln	Thr	Cys	Asp	Trp	Gly	Asn	Leu	Leu	Gln	Asp	Ile	Ile	Leu	Gln
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Val	Phe	Lys	Tyr	Leu	Pro	Leu	Leu	Asp	Arg	Ala	His	Ala	Ser	Gln	Val
				85				90						95	
Cys	Arg	Asn	Trp	Asn	Gln	Val	Phe	His	Met	Pro	Asp	Leu	Trp	Arg	Cys
			100					105					110		
Phe	Glu	Phe	Glu	Leu	Asn	Gln	Pro	Ala	Thr	Ser	Tyr	Leu	Lys	Ala	Thr
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His	Pro	Glu	Leu	Ile	Lys	Gln	Ile	Ile	Lys	Arg	His	Ser	Asn	His	Leu
		130				135					140				
Gln	Tyr	Val	Ser	Phe	Lys	Val	Asp	Ser	Ser	Lys	Glu	Ser	Ala	Glu	Ala
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Ala	Cys	Asp	Ile	Leu	Ser	Gln	Leu	Val	Asn	Cys	Ser	Leu	Lys	Thr	Leu
				165				170						175	
Gly	Leu	Ile	Ser	Thr	Ala	Arg	Pro	Ser	Phe	Met	Asp	Leu	Pro	Lys	Ser
			180					185					190		
His	Phe	Ile	Ser	Ala	Leu	Thr	Val	Val	Phe	Val	Asn	Ser	Lys	Ser	Leu
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		210				215					220				
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225					230					235				240	
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Cys	His	Gly	Leu	Arg	Glu	Leu	Ala	Leu	Asn	Tyr	His	Leu	Leu	Ser	Asp
			260					265					270		
Glu	Leu	Leu	Leu	Ala	Leu	Ser	Ser	Glu	Lys	His	Val	Arg	Leu	Glu	His
		275					280					285			
Leu	Arg	Ile	Asp	Val	Val	Ser	Glu	Asn	Pro	Gly	Gln	Thr	His	Phe	His
		290				295					300				
Thr	Ile	Gln	Lys	Ser	Ser	Trp	Asp	Ala	Phe	Ile	Arg	His	Ser	Pro	Lys
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Val	Asn	Leu	Val	Met	Tyr	Phe	Phe	Leu	Tyr	Glu	Glu	Glu	Phe	Asp	Pro
				325				330						335	
Phe	Phe	Arg	Tyr	Glu	Ile	Pro	Ala	Thr	His	Leu	Tyr	Phe	Gly	Arg	Ser
			340					345					350		
Val	Ser	Lys	Asp	Val	Leu	Gly	Arg	Val	Gly	Met	Thr	Cys	Pro	Arg	Leu

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Val	Glu	Leu	Val	Val	Cys	Ala	Asn	Gly	Leu	Arg	Pro	Leu	Asp	Glu	Glu
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Leu	Ile	Arg	Ile	Ala	Glu	Arg	Cys	Lys	Asn	Leu	Ser	Ala	Ile	Gly	Leu
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Gly	Glu	Cys	Glu	Val	Ser	Cys	Ser	Ala	Phe	Val	Glu	Phe	Val	Lys	Met
				405					410					415	
Cys	Gly	Gly	Arg	Leu	Ser	Gln	Leu	Ser	Ile	Met	Glu	Glu	Val	Leu	Ile
				420				425					430		
Pro	Asp	Gln	Lys	Tyr	Ser	Leu	Glu	Gln	Ile	His	Trp	Glu	Val	Ser	Lys
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His	Leu	Gly	Arg	Val	Trp	Phe	Pro	Asp	Met	Met	Pro	Thr	Trp		
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&lt;210&gt; 3513

&lt;211&gt; 2103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3513

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 2103

&lt;210&gt; 3514

&lt;211&gt; 484

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3514

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 Ala Lys Lys Ser Gln Gly Leu Trp Ser Asp Tyr Ser Glu Tyr Glu Pro  
 35 40 45  
 Lys Gly Glu Ser Gln Asn Thr Asp Leu Ser Pro Lys Pro Leu Ile Ser  
 50 55 60  
 Glu Gln Thr Val Ile Leu Gly Lys Thr Pro Leu Gly Arg Ile Asp Gln

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Glu	Asn	Asn	Glu	Thr	Lys	Gln	Ser	Phe	Cys	Leu	Ser	Pro	Asn	Ser	Val
				85					90					95	
Asp	His	Arg	Glu	Val	Gln	Val	Leu	Ser	Gln	Ser	Met	Pro	Leu	Thr	Pro
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His	Gln	Ala	Val	Pro	Ser	Gly	Glu	Arg	Pro	Tyr	Met	Cys	Val	Glu	Cys
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Gly	Lys	Cys	Phe	Gly	Arg	Ser	Ser	His	Leu	Leu	Gln	His	Gln	Arg	Ile
	130					135					140				
His	Thr	Gly	Glu	Lys	Pro	Tyr	Val	Cys	Ser	Val	Cys	Gly	Lys	Ala	Phe
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Ser	Gln	Ser	Ser	Val	Leu	Ser	Lys	His	Arg	Arg	Ile	His	Thr	Gly	Glu
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Lys	Pro	Tyr	Glu	Cys	Asn	Glu	Cys	Gly	Lys	Ala	Phe	Arg	Val	Ser	Ser
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Cys	Leu	Glu	Cys	Arg	Lys	Ala	Phe	Thr	Gln	Leu	Ser	His	Leu	Ile	Gln
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&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;211&gt; 303

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&lt;210&gt; 3521

&lt;211&gt; 638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3521

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240

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 480  
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<210> 3522

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3522

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		20						25				30			
Gln	His	Ala	Asp	Gln	Gly	Pro	Pro	Gly	Pro	His	Leu	Asp	Leu	His	Gln
	35					40					45				
Asp	Leu	Gln	Ala	Glu	Pro	Leu	Arg	Pro	Ala	Gly	Leu	Gly	Gly	Gly	Leu
	50					55					60				
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Gly	Leu	His	Leu	Leu	Gln	Asp	Pro	Thr	Pro	Gly	Arg	Leu	Cys	Gln	Ala
			85						90					95	
Pro	Ala	Gly	Pro	Pro	Gly	Gly	Gly	His	Gly	Pro	Ala	Gly	Arg	Gly	Gln
			100					105					110		
Pro	Ser	Arg	His	Arg	Pro	Gly	Glu	Pro	Gln	Gly	Gly	Arg	Gly	Gly	Xaa
	115					120						125			
Pro	Asp	Pro	Ser	Thr	Pro	Ser	Val	Arg	Gly	Ser	Gln	Arg	Thr	Ala	Ser
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Pro	Gly	Arg	Ala	Ser	Pro	Gly	Gly	Cys	Pro	Glu	Ala	Thr	Gly	Trp	Cys
145					150					155					160
Cys	Arg	His	Thr	Arg	Ser	Ala	Pro	Thr	Pro	Leu	Leu	Pro	Pro	Cys	Pro
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Ser	Pro	Ala	Ser	Ser											
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<210> 3523

<211> 2614

<212> DNA

<213> Homo sapiens

<400> 3523

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180  
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1680

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 1980  
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 2614

&lt;210&gt; 3524

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3524

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Pro	Arg	Tyr	Phe	Thr	Trp	Asp	Glu	Val	Ala	Gln	Arg	Ser	Gly	Cys	Glu
			20				25						30		
Glu	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Ser	Asp	Phe
		35				40					45				
Ser	Arg	Arg	His	Pro	Gly	Gly	Ser	Arg	Val	Ile	Ser	His	Tyr	Ala	Gly
	50				55					60					
Gln	Asp	Ala	Thr	Asp	Pro	Phe	Val	Ala	Phe	His	Ile	Asn	Lys	Gly	Leu
65				70				75						80	
Val	Lys	Lys	Tyr	Met	Asn	Ser	Leu	Leu	Ile	Gly	Glu	Leu	Ser	Pro	Glu
			85				90						95		
Gln	Pro	Ser	Phe	Glu	Pro	Thr	Lys	Asn	Lys	Glu	Leu	Thr	Asp	Glu	Phe
			100				105						110		
Arg	Glu	Leu	Arg	Ala	Thr	Val	Glu	Arg	Met	Gly	Leu	Met	Lys	Ala	Asn

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      115      120      125
His Val Phe Phe Leu Leu Tyr Leu Leu His Ile Leu Leu Leu Asp Gly
      130      135      140
Ala Ala Trp Leu Thr Leu Trp Val Phe Gly Thr Ser Phe Leu Pro Phe
145      150      155      160
Leu Leu Cys Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp
      165      170      175
Leu Gln His Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp
      180      185      190
Asn His Leu Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro
195      200      205
Ala Ser Trp Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn
210      215      220
Cys Phe Arg Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala
225      230      235      240
Leu Gly Lys Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr
      245      250      255
Met Pro Tyr Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro
      260      265      270
Ala Leu Leu Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile
275      280      285
Gln Arg Lys Lys Trp Val Asp Leu Val Trp Met Ile Thr Phe Tyr Val
290      295      300
Arg Phe Phe Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu
305      310      315      320
Gly Leu Phe Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp
      325      330      335
Val Thr Gln Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn
      340      345      350
Met Asp Trp Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys
355      360      365
Ser Ala Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu
370      375      380
His His Leu Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala
385      390      395      400
Pro Leu Val Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser
      405      410      415
Lys Pro Leu Leu Ser Ala Phe Ala Asp Ile Ile His Ser Leu Lys Glu
      420      425      430
Ser Gly Gln Leu Trp Leu Asp Ala Tyr Leu His Gln
      435      440

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&lt;210&gt; 3525

&lt;211&gt; 1116

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3525

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120

tggaacagaa accagatgat gcacaatatt attgtcaaag agcttattgt cacattcttc  
180

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 360  
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 420  
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 1020  
 ttggctcacc acctggccca ggacccctc tttggcagtg tttgcttctc ctacacaaat  
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 1116

&lt;210&gt; 3526

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3526

Ile	Thr	Asp	Glu	Lys	Arg	Ile	Phe	Phe	Tyr	Ile	Val	Ala	Val	Ala	Asp
1				5					10					15	
Ala	Lys	Lys	Ser	Arg	Glu	Phe	Asn	Pro	Asn	Asn	Ser	Thr	Ala	Val	Leu
			20					25					30		
Arg	Lys	Gly	Ile	Cys	Glu	Tyr	His	Leu	Lys	Asn	Tyr	Ala	Ala	Ala	Leu
		35					40					45			
Glu	Thr	Phe	Ile	Gly	Gly	Gln	Lys	Leu	Xaa	Ala	Asp	Ala	Asn	Phe	Ser
	50					55					60				
Asp	Trp	Ile	Lys	Arg	Cys	Gln	Glu	Ala	Gln	Asn	Gly	Ser	Glu	Ser	Glu
65					70					75				80	
Val	Val	Met	Glu	Pro	Ala	Leu	Glu	Gly	Thr	Gly	Lys	Glu	Gly	Lys	Lys
				85					90					95	
Ala	Ser	Ser	Arg	Lys	Arg	Thr	Leu	Ala	Glu	Pro	Pro	Ala	Lys	Gly	Leu
			100					105					110		
Leu	Gln	Pro	Val	Lys	Leu	Ser	Arg	Ala	Glu	Leu	Tyr	Lys	Glu	Pro	Thr

115	120	125
Asn Glu Glu Leu Asn Arg	Leu Arg Glu Thr Glu	Ile Leu Phe His Ser
130	135	140
Ser Leu Leu Arg Leu Gln Val	Glu Glu Leu Leu Lys	Glu Val Arg Leu
145	150	155
Ser Glu Lys Lys Lys Asp Arg	Ile Asp Ala Phe Leu Arg	Glu Val Asn
165	170	175
Gln Arg Val Val Arg Val Pro	Ser Val Pro Glu Thr Glu	Leu Thr Asp
180	185	190
Gln Ala Trp Leu Pro Ala Gly	Val Arg Val Pro Leu His	Gln Val Pro
195	200	205
Tyr Ala Val Lys Gly Cys Phe	Arg Phe Leu Pro Pro Ala	Gln Val Thr
210	215	220
Val Val Gly Ser Tyr Leu Leu	Gly Thr Cys Ile Arg Pro	Asp Ile Asn
225	230	235
Val Asp Val Ala Leu Thr Met	Pro Arg Glu Ile Leu Gln	Asp Lys Asp
245	250	255
Gly Leu Asn Gln Arg Tyr Phe	Arg Lys Arg Ala Leu Tyr	Leu Ala His
260	265	270
Leu Ala His His Leu Ala Gln	Asp Pro Leu Phe Gly Ser	Val Cys Phe
275	280	285
Ser Tyr Thr Asn Gly Cys His	Leu Lys Pro Ser Leu Leu	Leu Arg Pro
290	295	300

&lt;210&gt; 3527

&lt;211&gt; 2838

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3527

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120

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180

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300

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360

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420

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480

gagaaccccc cccgggtctg cagggaacct atggactgtg agcagaagat ggtggatggg  
540

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600

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660

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720



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2160  
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2220  
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2280  
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 2820  
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 2838

<210> 3528

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3528

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Leu	Phe	Phe	Ser	Cys	Ser	Pro	Arg	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Arg
			20					25					30		
Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Gly	Pro	Ile	Gln	Leu	Gln	Gln	Asp
			35				40					45			
Asp	Leu	Gly	Ala	Ala	Phe	Gln	Thr	Trp	Met	Asp	Thr	Ser	Gly	Ala	Leu
	50					55					60				
Arg	Pro	Glu	Ser	Tyr	Ser	Tyr	Pro	Asp	Arg	Leu	Val	Leu	Asp	Gln	Gly
65					70					75				80	
Gly	Glu	Ile	Phe	Lys	Thr	Leu	His	Tyr	Leu	Ser	Asn	Leu	Ile	Gln	Ser
				85				90						95	
Ile	Lys	Thr	Pro	Leu	Gly	Thr	Lys	Glu	Asn	Pro	Ala	Arg	Val	Cys	Arg
			100					105					110		
Asp	Leu	Met	Asp	Cys	Glu	Gln	Lys	Met	Val	Asp	Gly	Thr	Tyr	Trp	Val
		115					120					125			
Asp	Pro	Asn	Leu	Gly	Cys	Ser	Ser	Asp	Thr	Ile	Glu	Val	Ser	Cys	Asn
		130				135					140				
Phe	Thr	His	Gly	Gly	Gln	Thr	Cys	Leu	Lys	Pro	Ile	Thr	Ala	Ser	Lys
145					150					155					160
Val	Glu	Phe	Ala	Ile	Ser	Arg	Val	Gln	Met	Asn	Phe	Leu	His	Leu	Leu
				165				170						175	
Ser	Ser	Glu	Val	Thr	Gln	His	Ile	Thr	Ile	His	Cys	Leu	Asn	Met	Thr
			180					185					190		
Val	Trp	Gln	Glu	Gly	Thr	Gly	Gln	Thr	Pro	Ala	Lys	Gln	Ala	Val	Arg
		195					200					205			
Phe	Arg	Ala	Trp	Asn	Gly	Gln	Ile	Phe	Glu	Ala	Gly	Gly	Gln	Phe	Arg
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Pro	Glu	Val	Ser	Met	Asp	Gly	Cys	Lys	Val	Gln	Asp	Gly	Arg	Trp	His

225		230		235		240
Gln Thr Leu Phe Thr Phe Arg Thr Gln Asp Pro Gln Gln Leu Pro Ile						
		245		250		255
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&lt;210&gt; 3529

&lt;211&gt; 3026

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3529

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<210> 3530

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3530

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Thr	Thr	Ala	Trp	Arg	Pro	Ala	Thr	Leu	Pro	Pro	Arg	Ser	Pro	Ser	His
		20						25				30			
Cys	Xaa	Ser	Pro	Val	Ala	Gly	Val	Ala	His	Arg	Phe	His	Ser	Thr	Cys
	35						40				45				
Gly	Lys	Asn	Val	Thr	Leu	Glu	Glu	Asp	Gly	Thr	Arg	Ala	Val	Arg	Ala
	50					55				60					
Ala	Gly	Tyr	Ala	His	Gly	Leu	Val	Phe	Ser	Thr	Lys	Glu	Leu	Arg	Ala
65					70					75				80	
Glu	Glu	Val	Phe	Glu	Val	Lys	Val	Glu	Glu	Leu	Asp	Glu	Lys	Trp	Ala
			85						90				95		
Gly	Ser	Leu	Arg	Leu	Gly	Leu	Thr	Thr	Leu	Ala	Pro	Gly	Glu	Met	Gly
			100					105					110		
Pro	Gly	Ala	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Pro	Pro	Ser	Leu	Pro	Glu
	115						120					125			
Leu	Arg	Thr	Lys	Thr	Thr	Trp	Met	Val	Ser	Ser	Cys	Glu	Val	Arg	Arg
	130					135					140				
Asp	Gly	Gln	Leu	Gln	Arg	Met	Asn	Tyr	Gly	Arg	Asn	Leu	Glu	Arg	Leu
145					150					155				160	
Gly	Val	Lys	Trp	Leu	Ala	Pro	Gly	Thr	Gly	Glu	Gly	Leu	Gly	Val	Glu
			165					170					175		
Val	Ala	Gly	Arg	Gly	Gly	Leu	Asn	Ile	Val	Arg	Pro	Cys	Pro	Thr	Ser
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<210> 3531

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3531

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&lt;210&gt; 3532

&lt;211&gt; 254

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3532

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1				5					10					15	
Tyr	Ser	His	Asp	Gly	Thr	Asp	Ser	Pro	Pro	Asp	Ala	Asp	Glu	Val	Val
			20					25					30		
Ile	Val	Leu	Asn	Asn	Phe	Lys	Ser	Lys	Ile	Ile	Lys	Val	Lys	Val	Gln
		35				40						45			
Lys	Lys	Ala	Asp	Met	Val	Asn	Glu	Asp	Leu	Leu	Ser	Asp	Gly	Thr	Ser
	50					55					60				
Glu	Asn	Glu	Ser	Gly	Phe	Trp	Asp	Ser	Phe	Lys	Trp	Gly	Phe	Thr	Gly
65					70					75					80
Gln	Lys	Thr	Glu	Glu	Val	Lys	Gln	Asp	Lys	Asp	Asp	Ile	Ile	Asn	Ile
				85				90						95	
Phe	Ser	Val	Ala	Ser	Gly	His	Leu	Tyr	Glu	Arg	Phe	Leu	Arg	Ile	Met
			100					105					110		
Met	Leu	Ser	Val	Leu	Lys	Asn	Thr	Lys	Thr	Pro	Val	Lys	Phe	Trp	Phe
		115					120					125			
Leu	Lys	Asn	Tyr	Leu	Ser	Pro	Thr	Phe	Lys	Glu	Phe	Ile	Pro	Tyr	Met
		130				135					140				
Ala	Asn	Glu	Tyr	Asn	Phe	Gln	Tyr	Glu	Leu	Val	Gln	Tyr	Lys	Trp	Pro
145					150					155					160
Arg	Trp	Leu	His	Gln	Gln	Thr	Glu	Lys	Gln	Arg	Ile	Ile	Trp	Gly	Tyr
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Lys	Ile	Leu	Phe	Leu	Asp	Val	Leu	Phe	Pro	Leu	Val	Val	Asp	Lys	Phe

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400> 3533
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240
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tccattgatg actcctatgg ccggtacgat ttaatccaga acagtgagtc accagccagt
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<210> 3534  
<211> 313  
<212> PRT  
<213> Homo sapiens

<400> 3534  
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Met Asp Asn Leu Pro Ser Ala Ala Ser Pro Leu Glu Gln Asn Pro Ser  
35 40 45  
Lys His Gly Ala Ile Pro Gly Gly Leu Ser Ile Gly Pro Pro Gly Lys  
50 55 60  
Ser Ser Ile Asp Asp Ser Tyr Gly Arg Tyr Asp Leu Ile Gln Asn Ser  
65 70 75 80  
Glu Ser Pro Ala Ser Pro Pro Val Ala Val Pro His Ser Trp Ser Arg  
85 90 95  
Ala Lys Ser Asp Ser Asp Lys Ile Ser Asn Gly Ser Ser Ile Asn Trp  
100 105 110  
Pro Pro Glu Phe His Pro Gly Val Pro Trp Lys Gly Leu Gln Asn Ile  
115 120 125  
Asp Pro Glu Asn Asp Pro Asp Val Thr Pro Gly Ser Val Pro Thr Gly  
130 135 140  
Pro Thr Ile Asn Thr Thr Ile Gln Asp Val Asn Arg Tyr Leu Leu Lys  
145 150 155 160  
Ser Gly Gly Ser Ser Pro Pro Ser Ser Gln Asn Ala Thr Leu Pro Ser  
165 170 175  
Ser Ser Ala Trp Pro Leu Ser Ala Ser Gly Tyr Ser Ser Ser Phe Ser  
180 185 190  
Ser Ile Ala Ser Ala Pro Ser Val Ala Gly Lys Leu Ser Asp Ile Lys  
195 200 205  
Ser Thr Trp Ser Ser Gly Pro Thr Ser His Thr Gln Ala Ser Leu Ser  
210 215 220  
His Glu Leu Trp Lys Val Pro Arg Asn Ser Thr Ala Pro Thr Arg Pro  
225 230 235 240  
Pro Pro Gly Leu Thr Asn Pro Lys Pro Ser Ser Thr Trp Gly Ala Ser  
245 250 255  
Pro Leu Gly Trp Thr Ser Ser Tyr Ser Ser Gly Ser Ala Trp Ser Thr  
260 265 270  
Asp Thr Ser Gly Arg Thr Ser Ser Trp Leu Val Leu Arg Asn Leu Thr  
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Gly Phe Pro Leu Gly Pro Gln Cys Arg  
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<210> 3535  
<211> 723  
<212> DNA  
<213> Homo sapiens



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<210> 3536

<211> 163

<212> PRT

<213> Homo sapiens

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 20 25 30  
 Arg Val Ser Leu Leu Leu Leu Tyr Ile Ile His Gln Glu Glu Ile  
 35 40 45  
 Cys Ser Ser Lys Leu Asn Met Ser Asn Lys Glu Tyr Lys Phe Tyr Leu  
 50 55 60  
 His Ser Leu Leu Ser Leu Arg Gln Asp Glu Asp Ser Ser Phe Leu Ser  
 65 70 75 80  
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 85 90 95  
 Thr Ser Gln Ser Gln Cys Met Glu Thr Lys Thr Leu Gln Lys Lys Ser  
 100 105 110  
 Gly Ile Val Ser Ser Glu Gly Ala Asn Glu Ser Thr Leu Pro Gln Leu  
 115 120 125  
 Ala Ala Met Ile Ile Thr Leu Ser Leu Gln Gly Val Cys Leu Gly Gln  
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150

155

160

<210> 3537  
<211> 714  
<212> DNA  
<213> Homo sapiens

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<210> 3538  
<211> 154  
<212> PRT  
<213> Homo sapiens

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 35 40 45  
 Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Arg Ala Arg  
 50 55 60  
 Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly  
 65 70 75 80  
 His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg  
 85 90 95  
 Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

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Leu Pro Ser Pro Pro Thr Gln Gly His Pro Thr Ala Pro Pro Cys Pro
          115              120              125
Cys Pro Ser Pro Ser Leu Glu Val Pro Cys Pro Ala Gly Pro Val Asn
          130              135              140
Met Gln Trp Glu Ser Gln Ala Val Gln Trp
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&lt;210&gt; 3539

&lt;211&gt; 818

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3539

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420
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720
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818

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&lt;210&gt; 3540

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3540

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Leu Pro Val Cys Gly Arg Pro Val Thr Pro Ile Ala Gln Asn Gln Thr
          20              25              30
Thr Leu Gly Ser Ser Arg Ala Lys Leu Gly Asn Phe Pro Trp Gln Ala

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Phe Thr Ser Ile His Gly Arg Gly Gly Gly Ala Leu Leu Gly Asp Arg
      50              55              60
Trp Ile Leu Thr Ala Ala His Thr Val Tyr Pro Lys Asp Ser Val Ser
65              70              75              80
Leu Arg Lys Asn Gln Ser Val Asn Val Phe Leu Gly His Thr Ala Ile
      85              90              95
Asp Glu Met Leu Lys Leu Gly Asn His Pro Val His Arg Val Val Val
      100              105              110
His Pro Asp Tyr Arg Gln Asn Glu Ser His Asn Phe Ser Gly Asp Ile
      115              120              125
Ala Leu Leu Glu Leu Gln His Ser Ile Pro Leu Gly Pro Asn Val Leu
      130              135              140
Pro Val Cys Leu Pro Asp Asn Glu Thr Leu Tyr Arg Ser Gly Leu Leu
145              150              155              160
Gly Tyr Val Ser Gly Phe Gly Met Glu Met Gly Trp Leu Thr Thr Glu
      165              170              175
Leu Lys Tyr Ser
      180

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&lt;210&gt; 3541

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3541

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120
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180
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240
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300
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600
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aa
722

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&lt;210&gt; 3542

<211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 3542

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Arg Met Leu Ser Phe Gln Gly Leu Ala Glu Leu Ala His Arg Glu Tyr
 20           25           30
Gln Ala Gly Asp Phe Glu Ala Ala Glu Arg His Cys Met Gln Leu Trp
 35           40           45
Arg Gln Glu Pro Asp Asn Thr Gly Val Leu Leu Leu Ser Ser Ile
 50           55           60
His Phe Gln Cys Arg Arg Leu Asp Arg Ser Ala His Phe Ser Thr Leu
 65           70           75           80
Ala Ile Lys Gln Asn Pro Leu Leu Ala Glu Ala Tyr Ser Asn Leu Gly
 85           90           95
Asn Val Tyr Lys Glu Arg Gly Gln Leu Gln Glu Ala Ile Glu His Tyr
100           105           110
Arg His Ala Leu Arg Leu Lys Pro Asp Phe Ile Asp Gly Tyr Ile Asn
115           120           125
Ala Ala Ala Ala Leu Val Ala Ala Gly Asp Met Glu Gly Ala Val Gln
130           135           140
Ala Tyr Val Ser Ala Leu Gln Pro Gly
145           150

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<210> 3543  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 3543

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120
gtttggttgt tgctcaggat gtgtaatagt ttctcttcag ccataagcca cgctggttag
180
atattaattg agtggagaga tcttgacact cttccagtta tgcatttggt gtttgtcgtc
240
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360
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420
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480
cctcactatg aagaaggaca tattccaggc atattaataa taatattcta tggcatttcc
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atattctgtc tggttgccct agtgagggcc tccataactg atccaggaag actccctgag
600
aaccccaaga tcccatatgg agaaaggag ttctgggaat tatgtaacaa gtgtaatttg
660

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 780  
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 840  
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 900  
 gccataatga gactagcagc ctttatgggc attactatgt tagttggaat aactggactc  
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 1020  
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 1080  
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&lt;210&gt; 3544

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3544

Met	Gly	Leu	Arg	Ile	His	Phe	Val	Val	Asp	Pro	His	Gly	Trp	Cys	Cys
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Met	Gly	Leu	Ile	Val	Phe	Val	Trp	Leu	Tyr	Asn	Ile	Val	Leu	Ile	Pro
		20					25						30		
Lys	Ile	Val	Leu	Phe	Pro	His	Tyr	Glu	Glu	Gly	His	Ile	Pro	Gly	Ile
	35					40						45			
Leu	Ile	Ile	Ile	Phe	Tyr	Gly	Ile	Ser	Ile	Phe	Cys	Leu	Val	Ala	Leu
	50				55					60					
Val	Arg	Ala	Ser	Ile	Thr	Asp	Pro	Gly	Arg	Leu	Pro	Glu	Asn	Pro	Lys
65				70				75						80	
Ile	Pro	His	Gly	Glu	Arg	Glu	Phe	Trp	Glu	Leu	Cys	Asn	Lys	Cys	Asn
		85				90						95			
Leu	Met	Arg	Pro	Lys	Arg	Ser	His	His	Cys	Ser	Arg	Cys	Gly	His	Cys
		100				105						110			
Val	Arg	Arg	Met	Asp	His	His	Cys	Pro	Trp	Ile	Asn	Asn	Cys	Val	Gly
	115				120							125			
Glu	Asp	Asn	His	Trp	Leu	Phe	Leu	Gln	Leu	Cys	Phe	Tyr	Thr	Glu	Leu
	130				135					140					
Leu	Thr	Cys	Tyr	Ala	Leu	Met	Phe	Ser	Phe	Cys	His	Tyr	Tyr	Tyr	Phe
145				150					155					160	
Leu	Pro	Leu	Lys	Lys	Arg	Asn	Leu	Asp	Leu	Phe	Val	Phe	Arg	His	Glu
		165				170								175	
Leu	Ala	Ile	Met	Arg	Leu	Ala	Ala	Phe	Met	Gly	Ile	Thr	Met	Leu	Val
	180					185						190			
Gly	Ile	Thr	Gly	Leu	Phe	Tyr	Thr	Gln	Leu	Ile	Gly	Ile	Ile	Thr	Pro
	195				200							205			
Cys	Ser	Leu	Ile	Leu	Leu	Lys	Cys	Gly	Ser	Val	Ser	Asn	Asn	Ser	Leu

210	215	220
Gly Asp Leu Met Lys Ile Ser Glu Thr Phe Ala Leu Arg Ile Pro Ser		
225	230	235
Phe Val Val Met Cys Pro Glu Asn Ser Ser Leu Arg Val Phe Asn Ser		240
	245	250
Val Lys Leu Leu Leu Cys Leu Asp Ser Pro Leu Ile Gln Trp Ser Thr		255
	260	265
		270

Lys

&lt;210&gt; 3545

&lt;211&gt; 3657

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3545

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120
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180
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240
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360
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480
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720
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1020
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1140

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 2760



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 3600  
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 3657

&lt;210&gt; 3546

&lt;211&gt; 792

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3546

Val	Asn	Val	Trp	Arg	Val	Leu	Gly	Leu	Ala	Gln	Ala	Arg	Ala	Gly	Ala
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Gln	Glu	Val	Trp	Pro	Ile	Ile	Trp	Leu	Arg	Leu	Thr	Leu	Ala	Leu	Thr
		20						25					30		
Leu	Ala	Asp	Pro	Gly	Trp	Ala	Ser	Ile	Ser	Arg	Gly	Val	Leu	Val	Cys
		35					40					45			
Asp	Glu	Cys	Cys	Ser	Val	His	Arg	Ser	Leu	Gly	Arg	His	Ile	Ser	Ile
	50					55				60					
Val	Lys	His	Leu	Arg	His	Ser	Ala	Trp	Pro	Pro	Thr	Leu	Leu	Gln	Met
65					70				75					80	
Val	His	Thr	Leu	Ala	Ser	Asn	Gly	Ala	Asn	Ser	Ile	Trp	Glu	His	Ser
			85					90					95		
Leu	Leu	Asp	Pro	Ala	Gln	Val	Gln	Ser	Gly	Arg	Arg	Lys	Ala	Asn	Pro
		100						105					110		
Gln	Asp	Lys	Val	His	Pro	Ile	Lys	Ser	Glu	Phe	Ile	Arg	Ala	Lys	Tyr
	115						120					125			
Gln	Met	Leu	Ala	Phe	Val	His	Lys	Leu	Pro	Cys	Arg	Asp	Asp	Asp	Gly

2708

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Ser Val His Val Pro Ala Gly Leu Tyr Arg Ile Arg Lys Gly Val Ser
                    580                    585                    590
Ala Ser Ala Val Pro Phe Thr Pro Ser Ser Pro Leu Leu Ser Cys Ser
                    595                    600                    605
Gln Glu Gly Ser Arg His Thr Ser Lys Leu Ser Arg His Gly Ser Gly
                    610                    615                    620
Ala Asp Ser Asp Tyr Glu Asn Thr Gln Ser Gly Asp Pro Leu Leu Gly
625                    630                    635                    640
Leu Glu Gly Lys Arg Phe Leu Glu Leu Gly Lys Glu Glu Asp Phe His
                    645                    650                    655
Pro Glu Leu Glu Ser Leu Asp Gly Asp Leu Asp Pro Gly Leu Pro Ser
                    660                    665                    670
Thr Glu Asp Val Ile Leu Lys Thr Glu Gln Val Thr Lys Asn Ile Gln
                    675                    680                    685
Glu Leu Leu Arg Ala Ala Gln Glu Phe Lys His Asp Ser Phe Val Pro
                    690                    695                    700
Cys Ser Glu Lys Ile His Leu Ala Val Thr Glu Met Ala Ser Leu Phe
705                    710                    715                    720
Pro Lys Arg Pro Ala Leu Glu Pro Val Arg Ser Ser Leu Arg Leu Leu
                    725                    730                    735
Asn Ala Ser Ala Tyr Arg Leu Gln Ser Glu Cys Arg Lys Thr Val Pro
                    740                    745                    750
Pro Glu Pro Gly Ala Pro Val Asp Phe Gln Leu Leu Thr Gln Gln Val
                    755                    760                    765
Ile Gln Cys Ala Tyr Asp Ile Ala Lys Ala Ala Lys Gln Leu Val Thr
                    770                    775                    780
Ile Thr Thr Arg Glu Lys Lys Gln
785                    790

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&lt;210&gt; 3547

&lt;211&gt; 1039

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3547

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120
agtcattgaaa taaacccaag gaaagttttt gaacttatgg gaagcattgt cactgagatt
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240
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300
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360
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420
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480
tggaagtga atgaagctct aattcagaaa tggctgagct atccttctgg aagggttctt
540

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 660  
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 1039

&lt;210&gt; 3548

&lt;211&gt; 346

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3548

Arg	Ser	Gln	Lys	Ile	Val	Tyr	Ile	Cys	Cys	Gly	Glu	Asp	His	Thr	Ala
1				5				10						15	
Ala	Leu	Thr	Lys	Glu	Gly	Gly	Val	Phe	Thr	Phe	Gly	Ala	Gly	Gly	Tyr
			20					25					30		
Gly	Gln	Leu	Gly	His	Asn	Ser	Thr	Ser	His	Glu	Ile	Asn	Pro	Arg	Lys
		35					40					45			
Val	Phe	Glu	Leu	Met	Gly	Ser	Ile	Val	Thr	Glu	Ile	Ala	Cys	Gly	Arg
		50				55					60				
Gln	His	Thr	Ser	Ala	Phe	Val	Pro	Ser	Ser	Gly	Arg	Ile	Tyr	Ser	Phe
65					70					75				80	
Gly	Leu	Gly	Gly	Asn	Gly	Gln	Leu	Gly	Thr	Gly	Ser	Thr	Ser	Asn	Arg
				85					90					95	
Lys	Ser	Pro	Phe	Thr	Val	Lys	Gly	Asn	Trp	Tyr	Pro	Tyr	Asn	Gly	Gln
			100					105					110		
Cys	Leu	Pro	Asp	Ile	Asp	Ser	Glu	Glu	Tyr	Phe	Cys	Val	Lys	Arg	Ile
		115					120					125			
Phe	Ser	Gly	Gly	Asp	Gln	Ser	Phe	Ser	His	Tyr	Ser	Ser	Pro	Gln	Asn
		130				135					140				
Cys	Gly	Pro	Pro	Asp	Asp	Phe	Arg	Cys	Pro	Asn	Pro	Thr	Lys	Gln	Ile
145					150					155				160	
Trp	Thr	Val	Asn	Glu	Ala	Leu	Ile	Gln	Lys	Trp	Leu	Ser	Tyr	Pro	Ser
			165						170					175	
Gly	Arg	Phe	Pro	Val	Glu	Ile	Ala	Asn	Glu	Ile	Asp	Gly	Thr	Phe	Ser
			180					185					190		
Ser	Ser	Gly	Cys	Leu	Asn	Gly	Ser	Phe	Leu	Ala	Val	Ser	Asn	Asp	Asp
		195					200						205		
His	Tyr	Arg	Thr	Gly	Thr	Arg	Phe	Ser	Gly	Val	Asp	Met	Asn	Ala	Ala
	210					215					220				
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<210> 3549
<211> 2542
<212> DNA
<213> Homo sapiens
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120  
agatatgaga aaattcatgg aagaagtaag gaaaaggaga gagctagtct agataaaaaa  
180  
agagataaag actacagaag gaaagagatc ttgccttttg aaaagatgaa ggaacaaagg  
240  
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300  
agagagattg cagagagaga gcgtcgagag cgagaacgca ttagaataat tcgtgaacgg  
360  
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420  
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480  
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720  
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&lt;210&gt; 3550

&lt;211&gt; 500

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3550

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 Ser Lys Ser Pro Gly His Met Val Ile Leu Asp Gln Thr Lys Gly Asp  
 20 25 30  
 His Cys Arg Pro Ser Arg Arg Gly Arg Tyr Glu Lys Ile His Gly Arg  
 35 40 45  
 Ser Lys Glu Lys Glu Arg Ala Ser Leu Asp Lys Lys Arg Asp Lys Asp  
 50 55 60  
 Tyr Arg Arg Lys Glu Ile Leu Pro Phe Glu Lys Met Lys Glu Gln Arg  
 65 70 75 80  
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 85 90 95  
 Leu Arg Arg Arg Arg Glu Ile Ala Glu Arg Glu Arg Arg Glu Arg Glu  
 100 105 110  
 Arg Ile Arg Ile Ile Arg Glu Arg Glu Glu Arg Glu Arg Leu Gln Arg  
 115 120 125  
 Glu Arg Glu Arg Leu Glu Ile Glu Arg Gln Lys Leu Glu Arg Glu Arg  
 130 135 140  
 Met Glu Arg Glu Arg Leu Glu Arg Glu Arg Ile Arg Ile Glu Gln Glu  
 145 150 155 160  
 Arg Arg Lys Glu Ala Glu Arg Ile Ala Arg Glu Arg Glu Glu Leu Arg  
 165 170 175  
 Arg Gln Gln Gln Gln Leu Arg Tyr Glu Gln Glu Lys Arg Asn Ser Leu  
 180 185 190  
 Lys Arg Pro Arg Asp Val Asp His Arg Arg Asp Asp Pro Tyr Trp Ser  
 195 200 205  
 Glu Asn Lys Lys Leu Ser Leu Asp Thr Asp Ala Arg Phe Gly His Gly  
 210 215 220  
 Ser Asp Tyr Ser Arg Gln Gln Asn Arg Phe Asn Asp Phe Asp His Arg  
 225 230 235 240  
 Glu Arg Gly Arg Phe Pro Glu Ser Ser Ala Val Gln Ser Ser Ser Phe  
 245 250 255  
 Glu Arg Arg Asp Arg Phe Val Gly Gln Ser Glu Gly Lys Lys Ala Arg  
 260 265 270  
 Pro Thr Ala Arg Arg Glu Asp Pro Ser Phe Glu Arg Tyr Pro Lys Asn  
 275 280 285  
 Phe Ser Asp Ser Arg Arg Asn Glu Pro Pro Pro Pro Arg Asn Glu Leu  
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 Arg Glu Ser Asp Arg Arg Glu Val Arg Gly Glu Arg Asp Glu Arg Arg  
 305 310 315 320  
 Thr Val Ile Ile His Asp Arg Pro Asp Ile Thr His Pro Arg His Pro  
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 Arg Glu Ala Gly Pro Asn Pro Ser Arg Pro Thr Ser Trp Lys Ser Asp  
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 Gly Ser Met Ser Thr Asp Lys Arg Glu Thr Arg Val Glu Arg Pro Glu  
 355 360 365  
 Arg Ser Gly Arg Glu Val Ser Gly His Ser Val Arg Gly Ala Pro Pro

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      370              375              380
Gly Asn Arg Ser Ser Ala Ser Gly Tyr Gly Ser Arg Glu Gly Asp Arg
385              390              395              400
Gly Val Ile Thr Asp Arg Gly Gly Gly Ser Gln His Tyr Pro Glu Glu
      405              410              415
Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys
      420              425              430
Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg
      435              440              445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser
      450              455              460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser
465              470              475              480
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Pro Arg Arg Phe
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<210> 3551  
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 <212> DNA  
 <213> Homo sapiens

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120
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180
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240
catgggctcc agttaaattc attagtgggc cagatgtgtg tcccctgtca gctggccaag
300
taacccact gtttatcgac aggttctcag gaatcagata gctcgcagtc ggccaagaag
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420
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gtcat
545

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<210> 3552  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

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<400> 3552
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Ala Lys Lys Asp Met Leu Ala Ala Leu Lys Ser Arg Gln Glu Ala Leu

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Glu	Glu	Thr	Leu	Arg	Gln
			Arg	Leu	Glu
			Glu	Leu	Lys
				Lys	Leu
					Cys
					Leu
	35		40		45
Arg	Glu	Ala	Val	Ser	Leu
	50		55		

&lt;210&gt; 3553

&lt;211&gt; 1412

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3553

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 720  
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 1412

<210> 3554

<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

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Gln	Asp	Val	Val	Gly	Arg	Phe	Asn	Glu	Arg	Phe	Ile	Leu	Ser	Leu	Ala
		20						25					30		
Ser	Cys	Lys	Lys	Cys	Leu	Val	Ile	Asp	Asp	Gln	Leu	Asn	Ile	Leu	Pro
	35						40					45			
Ile	Ser	Ser	His	Val	Ala	Thr	Met	Glu	Ala	Leu	Pro	Pro	Gln	Thr	Pro
	50					55					60				
Asp	Glu	Ser	Leu	Gly	Pro	Ser	Asp	Leu	Glu	Leu	Arg	Glu	Leu	Lys	Glu
65					70				75					80	
Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
			85					90					95		
Thr	Leu	Asp	Gln	Ala	Lys	Ala	Val	Leu	Lys	Phe	Ile	Glu	Gly	Ile	Ser
	100							105					110		
Glu	Lys	Thr	Leu	Arg	Ser	Thr	Val	Ala	Leu	Thr	Ala	Ala	Arg	Gly	Arg
	115						120					125			
Gly	Lys	Ser	Ala	Ala	Leu	Gly	Leu	Ala	Ile	Ala	Gly	Ala	Val	Ala	Phe
	130					135					140				
Gly	Tyr	Ser	Asn	Ile	Phe	Val	Thr	Ser	Pro	Ser	Pro	Asp	Asn	Leu	His
145					150				155					160	
Thr	Leu	Phe	Glu	Phe	Val	Phe	Lys	Gly	Phe	Asp	Ala	Leu	Gln	Tyr	Gln
			165					170					175		
Glu	His	Leu	Asp	Tyr	Glu	Ile	Ile	Gln	Ser	Leu	Asn	Pro	Glu	Phe	Asn
	180							185					190		
Lys	Ala	Val	Ile	Ile	Val	Asn	Val	Phe	Arg	Glu	His	Arg	Gln	Thr	Ile
	195					200						205			
Gln	Tyr	Ile	His	Pro	Ala	Asp	Ala	Val	Lys	Leu	Gly	Gln	Ala	Glu	Leu
	210					215					220				
Val	Val	Ile	Asp	Glu	Ala	Ala	Ala	Ile	Pro	Leu	Pro	Leu	Val	Lys	Ser
225					230				235					240	
Leu	Leu	Gly	Pro	Tyr	Leu	Val	Phe	Met	Ala	Ser	Thr	Ile	Asn	Gly	Tyr
			245					250					255		
Glu	Gly	Thr	Gly	Arg	Ser	Leu	Ser	Leu	Lys	Leu	Ile	Gln	Gln	Leu	Arg
	260							265					270		
Gln	Gln	Ser	Ala	Gln	Ser	Gln	Val	Ser	Thr	Thr	Ala	Glu	Asn	Lys	Thr
	275						280					285			
Thr	Thr	Thr	Ala	Arg	Leu	Ala	Ser	Ala	Arg	Thr	Leu	His	Glu	Val	Ser
	290					295					300				
Leu	Gln	Glu	Ser	Ile	Arg	Tyr	Ala	Pro	Gly	Asp	Ala	Val	Glu	Lys	Trp
305					310				315					320	
Leu	Asn	Asp	Leu	Leu	Cys	Leu	Asp	Cys	Leu	Asn	Ile	Thr	Arg	Ile	Val

	325		330		335
Ser Gly Cys Pro Leu Pro Glu Ala Cys Glu Leu Tyr Tyr Val Asn Arg					
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Asp Thr Leu Phe Cys Tyr His Lys Ala Ser Glu Val Phe Leu Gln Arg					
	355		360		365
Leu Met Ala Leu Tyr Val Ala Ser His Tyr Lys Asn Ser Pro Asn Asp					
	370		375		380
Leu Gln Met Leu Ser Asp Ala Pro Ser His His Leu Phe Cys Leu Leu					
385		390		395	400
Pro Pro Val Pro Pro Thr Gln Asn Ala Leu Pro Lys Val Leu Ala Val					
	405		410		415
Ile Gln Val					

&lt;210&gt; 3555

&lt;211&gt; 1038

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3555

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120

atgaaccagg cgttgacagag gcgcttcgcc aaggggggtgc agtacaacat gaagatagtg

180

atccggggag acaggaacac gggcaagaca gcgctgtggc accgcctgca gggccggccc

240

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360

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420

gccttgatg ctgagttcct ggacgtgtac aagaactgca acgggggtgt catgatgttc

480

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540

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1038

<210> 3556

<211> 333

<212> PRT

<213> Homo sapiens

<400> 3556

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Arg	Asp	Lys	Asn	Ile	Pro	Ala	Gly	Leu	Gln	Ser	Met	Asn	Gln	Ala	Leu	20	25	30	
Gln	Arg	Arg	Phe	Ala	Lys	Gly	Val	Gln	Tyr	Asn	Met	Lys	Ile	Val	Ile	35	40	45	
Arg	Gly	Asp	Arg	Asn	Thr	Gly	Lys	Thr	Ala	Leu	Trp	His	Arg	Leu	Gln	50	55	60	
Gly	Arg	Pro	Phe	Val	Glu	Glu	Tyr	Ile	Pro	Thr	Gln	Glu	Ile	Gln	Val	65	70	75	80
Thr	Ser	Ile	His	Trp	Ser	Tyr	Lys	Thr	Thr	Asp	Asp	Ile	Val	Lys	Val	85	90	95	
Glu	Val	Trp	Asp	Val	Val	Asp	Lys	Gly	Lys	Cys	Lys	Lys	Arg	Gly	Asp	100	105	110	
Gly	Leu	Lys	Met	Glu	Asn	Asp	Pro	Gln	Glu	Ala	Glu	Ser	Glu	Met	Ala	115	120	125	
Leu	Asp	Ala	Glu	Phe	Leu	Asp	Val	Tyr	Lys	Asn	Cys	Asn	Gly	Val	Val	130	135	140	
Met	Met	Phe	Asp	Ile	Thr	Lys	Gln	Trp	Thr	Phe	Asn	Tyr	Ile	Leu	Arg	145	150	155	160
Glu	Leu	Pro	Lys	Val	Pro	Thr	His	Val	Pro	Val	Cys	Val	Leu	Gly	Asn	165	170	175	
Tyr	Arg	Asp	Met	Gly	Glu	His	Arg	Val	Ile	Xaa	Cys	Arg	Thr	Xaa	Val	180	185	190	
Arg	Asp	Phe	Ile	Asp	Asn	Leu	Asp	Arg	Pro	Pro	Gly	Ser	Ser	Tyr	Phe	195	200	205	
Arg	Tyr	Ala	Glu	Ser	Ser	Met	Lys	Asn	Ser	Phe	Gly	Leu	Lys	Tyr	Leu	210	215	220	
His	Lys	Phe	Phe	Asn	Ile	Pro	Phe	Leu	Gln	Leu	Gln	Arg	Glu	Thr	Leu	225	230	235	240
Leu	Arg	Gln	Leu	Glu	Thr	Asn	Gln	Leu	Asp	Met	Asp	Ala	Thr	Leu	Glu	245	250	255	
Glu	Leu	Ser	Val	Gln	Gln	Glu	Thr	Glu	Asp	Gln	Asn	Tyr	Gly	Ile	Phe	260	265	270	
Leu	Glu	Met	Met	Glu	Ala	Arg	Ser	Arg	Gly	His	Ala	Ser	Pro	Leu	Ala	275	280	285	
Ala	Asn	Gly	Gln	Ser	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Pro	Val	Val	Pro	290	295	300	
Ala	Gly	Ala	Val	Ser	Thr	Gly	Ser	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro	305	310	315	320
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<210> 3557

<211> 486

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3557

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&lt;210&gt; 3558

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3558

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Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala	Ile
			20					25					30		
Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
		35					40					45			
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
	50				55					60					
Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly	Lys
65				70				75						80	
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
			85					90					95		
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
			100					105					110		
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
		115				120						125			
Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
	130				135					140					
Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro
145				150					155						160
Leu	Asp														

&lt;210&gt; 3559

&lt;211&gt; 673

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3559

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ctaacgcaga tcg
673

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&lt;210&gt; 3560

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3560

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Ala Ile Glu Arg Val Leu Arg Asp Tyr Ser Asp Lys His Arg Ala Thr
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Phe Lys Phe Glu Ser Thr Asp Glu Asp Lys Arg Lys Lys Leu Cys Glu
 35          40          45
Gly Ile Phe Lys Val Leu Ile Lys Asp Ile Pro Thr Thr Cys Gln Val
 50          55          60
Ser Cys Leu Glu Val Leu Arg Ile Leu Ser Arg Asp Lys Lys Val Leu
 65          70          75          80
Val Pro Val Thr Thr Lys Glu Asn Met Gln Ile Leu Leu Arg Leu Ala
 85          90          95
Lys Leu Asn Glu Leu Asp Asp Ser Leu Glu Lys Val Ser Glu Phe Pro
100         105         110
Val Ile Val Glu Ser Leu Lys Cys Leu Cys Asn Ile Val Phe Asn Ser
115         120         125
Gln Met Ala Gln Gln Leu Ser Leu Glu Leu Asn Leu Ala Ala Lys Leu
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Cys Asn Leu Leu Arg Lys Cys Lys Asp Arg Lys Phe Ile Asn Asp Ile

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145                      150                      155                      160  
 Lys Cys Phe Asp Leu Arg Leu Leu Phe Leu Leu Ser Leu Leu His Thr  
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 Asp Ile Arg Ser Gln Leu Arg Tyr Glu Leu Gln Gly Leu Pro Leu Leu  
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 Thr Gln Ile  
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<210> 3561

<211> 523

<212> DNA

<213> Homo sapiens

<400> 3561

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<210> 3562

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3562

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                          20                      25                      30  
 Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu  
                          35                      40                      45  
 Met Glu Gly Trp Ala Gly Ser Gly Gly Val Gly Ser Gln Thr Asp Ser  
                          50                      55                      60  
 Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe  
 65                      70                      75                      80  
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<210> 3563  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

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<210> 3564  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 3564  
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 Cys Val Arg Ile Leu Leu Asp Pro Tyr Ser Arg Met Pro Ala Ser Ser  
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 Leu Val

<210> 3565  
 <211> 580  
 <212> DNA  
 <213> Homo sapiens

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 180  
 cgctacgccc gccgggagcc gggcagagcg gccaaagatgt cgagcccaa gaaaagaaag  
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 cttgagtcgg ggggcggcgc cgaaggaggg gaggggaactg aagaggaaga tggcgcgagg  
 300



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 420  
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<210> 3566

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3566

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		20						25					30		
Arg	Ala	Thr	Pro	Gln	Glu	Val	Gly	Arg	Thr	Ser	Ala	His	Phe	Lys	Ser
		35					40					45			
Gln	Lys	Pro	Pro	Phe	Pro	Gly	Ala	Arg	Ala	Val	Pro	Arg	Tyr	Ala	Arg
	50					55				60					
Arg	Glu	Pro	Gly	Arg	Ala	Ala	Lys	Met	Ser	Gln	Pro	Lys	Lys	Arg	Lys
65				70					75					80	
Leu	Glu	Ser	Gly	Gly	Gly	Ala	Glu	Gly	Gly	Glu	Gly	Thr	Glu	Glu	Glu
			85					90					95		
Asp	Gly	Ala	Glu	Arg	Glu	Ala	Ala	Leu	Glu	Arg	Pro	Arg	Thr	Thr	Lys
		100						105					110		
Arg	Glu	Arg	Asp	Gln	Leu	Tyr	Tyr	Glu	Cys	Tyr	Ser	Asp	Val	Ser	Val
		115				120						125			
His	Glu	Glu	Met	Ile	Ala	Asp	Arg	Val	Arg	Thr	Asp	Ala	Tyr	Arg	Trp
	130				135					140					
Val	Ser	Leu	Arg	Asn	Trp	Ala	Ala	Leu	Arg	Gly	Lys	Thr	Val	Leu	Asp
145				150					155				160		
Val	Gly	Ala	Gly	Thr	Gly	Ile	Leu	Ser	Ile	Phe	Cys	Ala	Gln	Ala	Gly
			165				170						175		
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Arg

<210> 3567

<211> 2811

<212> DNA

<213> Homo sapiens

<400> 3567

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2811

&lt;210&gt; 3568

&lt;211&gt; 869

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3568

Pro	Arg	Leu	Pro	Cys	Arg	Ser	Cys	Arg	Ser	Gly	Gly	Thr	Arg	Ser	Ser
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Phe	Gln	Lys	Gln	Leu	Arg	Gly	Gln	Ile	Ala	Arg	Arg	Val	Tyr	Arg	Gln
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Leu	Leu	Ala	Glu	Lys	Arg	Glu	Gln	Glu	Glu	Lys	Lys	Lys	Gln	Glu	Glu
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Arg	Arg	Glu	Ala	Glu	Leu	Arg	Ala	Gln	Gln	Glu	Glu	Glu	Thr	Arg	Lys

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Thr	Arg	Glu	Leu	Glu	Lys	Gln	Lys	Glu	Asn	Lys	Gln	Val	Glu	Glu	Ile	
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Pro	Tyr	Pro	Glu	Glu	Glu	Val	Asp	Glu	Gly	Phe	Glu	Ala	Asp	Asp	Asp	
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 580 585 590  
 Ile Ile Thr Ala Asn Arg Val Leu His Cys Asn Ala Asp Thr Pro Glu  
 595 600 605  
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 Arg Val Glu Gly Gln Glu Phe Ile Val Arg Gly Trp Leu His Lys Glu  
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 Val Lys Asn Ser Pro Lys Met Ser Ser Leu Lys Leu Lys Lys Arg Trp  
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 690 695 700  
 Thr Val Tyr Gly Arg Lys His Cys Tyr Arg Leu Tyr Thr Lys Leu Leu  
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 Asn Glu Ala Thr Arg Trp Ser Ser Val Ser Gln Asn Val Thr Asp Thr  
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 Lys Ala Pro Ile Asp Thr Pro Thr Gln Gln Leu Ile Gln Asp Ile Lys  
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 770 775 780  
 Leu Pro Tyr Gly Asp Ile Asn Leu Asn Leu Lys Asp Lys Gly Tyr  
 785 790 795 800  
 Thr Thr Leu Gln Asp Glu Ala Ile Lys Ile Phe Asn Ser Leu Gln Gln  
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 Leu Glu Ser Met Ser Asp Pro Ile Pro Ile Ile Gln Gly Ile Leu Gln  
 820 825 830  
 Thr Gly His Asp Leu Arg Pro Leu Arg Asp Glu Leu Tyr Cys Gln Leu  
 835 840 845  
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 850 855 860  
 Tyr Ser Trp Gln Ile  
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&lt;210&gt; 3569

&lt;211&gt; 5070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3569

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<211> 893

<212> PRT

<213> Homo sapiens

<400> 3570

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Arg	Ala	Pro	Ser	Pro	Pro	Trp	Pro	Pro	Gln	Gly	Pro	Leu	Ser	Pro	Gly
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Pro	Gly	Ser	Leu	Pro	Leu	Ser	Ile	Ala	Arg	Val	Gln	Thr	Pro	Pro	Trp
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His	Pro	Pro	Gly	Ala	Pro	Ser	Pro	Gly	Leu	Leu	Gln	Asp	Ser	Asp	Ser
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Leu	Ser	Gly	Ser	Tyr	Leu	Asp	Pro	Asn	Tyr	Gln	Ser	Ile	Lys	Trp	Gln
				85					90					95	
Pro	His	Gln	Gln	Asn	Lys	Trp	Ala	Thr	Leu	Tyr	Asp	Ala	Asn	Tyr	Lys
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Glu	Leu	Pro	Met	Leu	Thr	Tyr	Arg	Val	Asp	Ala	Asp	Lys	Gly	Phe	Asn
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Phe	Ser	Val	Gly	Asp	Asp	Ala	Phe	Val	Cys	Gln	Lys	Lys	Asn	His	Phe
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Gln	Val	Thr	Val	Tyr	Ile	Gly	Met	Leu	Gly	Glu	Pro	Lys	Tyr	Val	Lys
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Thr	Pro	Glu	Gly	Leu	Lys	Pro	Leu	Asp	Cys	Phe	Tyr	Leu	Lys	Leu	His
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Gln	Asn	Tyr	Thr	Leu	Ala	Ala	Gln	Ile	Ser	Glu	Arg	Ile	Ile	Val	Arg
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Ala	Ser	Asn	Pro	Gly	Gln	Phe	Glu	Ser	Asp	Ser	Asp	Val	Leu	Trp	Gln
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Val	Met	Gly	Ser	Leu	Met	His	Pro	Ser	Asp	Leu	Arg	Ala	Lys	Glu	His
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 Phe Met Glu Asn Val Gly Ala Val Lys Glu Leu Cys Lys Leu Thr Asp  
 420 425 430  
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 His Lys Lys Arg Pro Pro Lys Val Ala Ser Lys Ser Ser Val Val  
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 690 695 700  
 Val Pro Phe Pro Gly Gly Gln Gly Lys Ala Lys Asn Ser Pro Ser Leu  
 705 710 715 720  
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 725 730 735  
 Pro Ala Glu Pro Thr Trp Ala Gln Gly Gln Ser Ala Ser Leu Leu Ala  
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Ser Leu Thr Leu Gln Met Asn Ser Ser Ser Pro Val Ser Val Val Leu				
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Cys Ser Leu Arg Ser Lys Glu Glu Pro Cys Glu Glu Gly Ser Leu Pro				
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Gln Ser Leu His Thr His Gln Asp Thr Gln Gly Thr Ser His Arg Trp				
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Pro Ile Thr Ile Leu Ser Phe Arg Glu Phe Thr Tyr His Phe Arg Val				
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Ala Leu Leu Gly Gln Ala Asn Cys Ser Ser Glu Ala Leu Ala Gln Pro				
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&lt;210&gt; 3571

&lt;211&gt; 528

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3571

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&lt;210&gt; 3572

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3572

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Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu				
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Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His				

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Leu Leu Val	Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro			
65		70	75	80
Ala Leu Leu	Pro Gln Val Ser Thr Gln Val Ala Gln Ala Ala Leu Arg			
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&lt;210&gt; 3573

&lt;211&gt; 1236

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3573

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<211> 361

<212> PRT

<213> Homo sapiens

<400> 3574

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Thr	Cys	Val	Phe	Asn	Lys	Pro	Gly	Gly	His	Thr	Ala	Ser	His	Thr	His
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Thr	Leu	Thr	Ala	Thr	Asn	Pro	Arg	Ser	His	Ala	His	Ala	Asp	Ala	Pro
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Cys	Gly	Thr	Cys	Thr	His	Asn	His	Thr	Cys	Val	Gln	Ser	Gly	Arg	His
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Thr	His	Thr	Cys	Ile	Glu	Ala	Ser	Leu	Trp	Thr	Pro	Ser	Ala	Ser	His
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Pro	Phe	Asp	Val	Glu	Arg	Gly	Pro	Pro	Ser	Pro	Ala	Val	Gln	His	Phe
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	195					200						205			
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	210					215					220				
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Glu	Arg	Arg	Val	Leu	Leu	Thr	Ala	Ser	Lys	Leu	Ser	Thr	Leu	Arg	Arg
			325					330					335		
Gly	Pro	Pro	Gly	Arg	Gly	Gly	Ser	Arg	Ala	Trp	Leu	Arg	Pro	Gly	Gly
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 <211> 769  
 <212> DNA  
 <213> Homo sapiens

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 360  
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 480  
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 720  
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 769

<210> 3576  
 <211> 205  
 <212> PRT  
 <213> Homo sapiens

<400> 3576  
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 Ile Pro Lys Met Met Phe Leu Pro Asn Glu Cys Leu His Phe Ile Phe  
 50 55 60  
 Gln Thr Cys Ser Leu Lys Pro Ile Ile Ala Pro Leu Arg Asn Ile Phe  
 65 70 75 80  
 Thr Ser Ser Ser Gly Met Ser Leu Ser Ala Gly Ser Ser Pro Leu His  
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 Ser Pro Lys Ile Thr Pro His Thr Ser Pro Ala Pro Arg Arg Arg Ser

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His	Thr	Pro	Asn	Pro	Ala	Ser	Tyr	Met	Val	Pro	Ser	Ser	Ala	Ser	Thr
	115		120		125										
Ser	Val	Asn	Asn	Pro	Val	Ser	Gln	Thr	Pro	Ser	Ser	Gly	Gln	Val	Ile
	130		135		140										
Gln	Lys	Glu	Thr	Val	Gly	Gly	Thr	Thr	Tyr	Phe	Tyr	Thr	Asp	Thr	Thr
145			150		155				160						
Pro	Ala	Pro	Leu	Thr	Gly	Met	Val	Phe	Pro	Asn	Tyr	His	Ile	Tyr	Pro
	165		170		175										
Pro	Thr	Ala	Pro	His	Val	Ala	Tyr	Met	Gln	Pro	Lys	Ala	Asn	Ala	Pro
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Ser	Phe	Phe	Met	Ala	Asp	Glu	Leu	Arg	Gln	Glu	Leu	Ile			
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&lt;210&gt; 3577

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3577

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<210> 3578

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3578

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		20						25					30		
Ile	Ser	Glu	His	Phe	His	Pro	Thr	Val	Ile	Gly	Glu	Ser	Met	Tyr	Gly
		35					40					45			
Asp	Phe	Glu	Glu	Ala	Phe	Asp	His	Leu	Gln	Asn	Arg	Leu	Ile	Ala	Thr
	50					55					60				
Lys	Asn	Pro	Glu	Glu	Ile	Arg	Gly	Gly	Gly	Leu	Leu	Lys	Tyr	Ser	Asn
65					70					75				80	
Leu	Leu	Val	Arg	Asp	Phe	Arg	Pro	Thr	Asp	Gln	Glu	Glu	Ile	Lys	Thr
			85					90						95	
Leu	Glu	Arg	Tyr	Met	Cys	Ser	Arg	Phe	Phe	Ile	Asp	Phe	Pro	Asp	Ile
		100						105					110		
Leu	Glu	Gln	Gln	Arg	Lys	Leu	Glu	Thr	Tyr	Leu	Gln	Asn	His	Phe	Ala
		115					120					125			
Glu	Glu	Glu	Arg	Ser	Lys	Tyr	Asp	Tyr	Leu	Met	Ile	Leu	Arg	Arg	Val
	130				135						140				
Val	Asn	Glu	Ser	Thr	Val	Cys	Leu	Met	Gly	His	Glu	Arg	Arg	Gln	Thr
145					150					155				160	
Leu	Asn	Leu	Ile	Ser	Leu	Leu	Ala	Leu	Arg	Val	Leu	Gly	Gly	Thr	Lys
			165					170						175	
His	His	Pro	Pro	Val	Pro	Pro	Arg	Ser	Pro	Val	Thr	Thr	Ser	Gly	Pro
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<210> 3579

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3579

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 180



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 240  
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&lt;210&gt; 3580

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3580

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Ser	Leu	Trp	Ile	Leu	Pro	Ser	Phe	Phe	Gly	Val	Lys	Trp	Pro	Pro	Gln
			20					25					30		
Glu	Thr	Lys	Gln	His	Glu	Lys	Trp	Leu	Ser	Gln	Pro	Thr	Cys	Ser	Asp
		35				40					45				
Met	Pro	Arg	Asn	Phe	Ser	Ser	Gly	Pro	Gly	Ser	Gly	Gly	Leu	Leu	Ile
	50				55					60					
Phe	Ser	Gln	Asp	Ile	Val	Leu	Ser	Trp	Asn	Leu	Ala	Gly	Gly	Trp	Ser
65				70					75					80	
Ile	Cys	Ile	Trp	Ser	Ile	Ala	Arg	Leu	Ser	His	Leu	Ser	Ser	Asp	Gln
			85					90						95	
Lys	Cys	Ile	Ser	Lys	Ile	Ile	Thr	Ser	Thr	Lys	Thr	Ile	Ile	Asp	Cys
			100					105						110	
Glu	Gln	Thr	Phe	Ser	Val	Thr	Ser	Arg							
		115					120								

&lt;210&gt; 3581

&lt;211&gt; 2132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3581

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ggcgctgct ggacttgtag tcggcgggag agcagcgagt gtacgaggcg cgggaccgag  
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<210> 3582

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3582

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			20					25					30		
Ala	Ala	Pro	Gly	Val	Ala	Pro	Arg	Gly	Ala	Cys	Trp	Thr	Cys	Thr	Arg
			35				40					45			
Arg	Ala	Ser	Ser	Ala	Cys	Thr	Arg	Arg	Gly	Thr	Ala	Ala	Ala	Trp	Ser
			50				55				60				
Ser	Arg	Pro	Arg	Pro	Ser	Thr	Thr	Ala	Thr	Ser	Arg	Cys	Ser	Ser	Ala
						70				75				80	
Arg	Trp	Arg	Arg	Arg	Thr	Arg	Gly	Cys	Thr	Pro	Ala	Thr	Cys	Thr	Ile
					85				90					95	
Thr	Thr	Ala	Thr	Ser	Thr	Arg	Ala	Trp	Pro	Ser	Ala	Trp	Arg	Ser	Pro
			100					105					110		
Thr	Ala	Pro	Arg	Pro	Pro	Pro	Pro	Thr	Gly	Thr	Ala	Arg	Arg	Arg	Cys
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Trp	Arg	Trp	Arg	Ala	Ala	His	Pro	Arg	Phe						
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<210> 3583

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3583

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 120  
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 180  
 gtctctgagg ctgtgggttc tacagggtca ccacgagctt ggcttacttg tctcatcctt  
 240

Met Ser Arg Pro Leu Leu Ile Thr Phe Thr Pro Ala Thr Asp Pro Ser  
1                      5                      10                      15  
Asp Leu Trp Lys Asp Gly Gln Gln Gln Pro Gln Pro Glu Lys Pro Glu

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Gly Asp Glu Ser Ser Ala Pro Asp Ser Gln Arg Ser Gln Thr Glu Pro
      50      55      60
Ala Arg Glu Arg Lys Arg Lys Lys Arg Arg Ile Met Lys Ala Pro Ala
      65      70      75      80
Ala Glu Ala Val Ala Glu Gly Ala Ser Gly Arg His Gly Gln Gly Arg
      85      90      95
Ser Leu Glu Ala Glu Asp Lys Met Thr His Arg Ile Leu Arg Ala Ala
      100      105      110
Gln Glu Gly Asp Leu Pro Glu Leu Arg Arg Leu Leu Glu Pro His Glu
      115      120      125
Ala Gly Gly Ala Gly Gly Asn Ile Asn Ala Arg Asp Ala Phe Trp Trp
      130      135      140
Thr Pro Leu Met Cys Ala Ala Arg Ala Gly Gln Gly Ala Ala Val Ser
      145      150      155      160
Tyr Leu Leu Gly Arg Gly Ala Ala Trp Val Gly Val Cys Glu Leu Ser
      165      170      175
Gly Arg Asp Ala Ala Gln Leu Ala Glu Glu Ala Gly Phe Pro Glu Val
      180      185      190
Ala Arg Met Val Arg Glu Ser His Gly Glu Thr Arg Ser Pro Glu Asn
      195      200      205
Arg Ser Pro Thr Pro Ser Leu Gln Tyr Cys Glu Asn Cys Asp Thr His
      210      215      220
Phe Gln Asp Ser Asn His Arg Thr Ser Thr Ala His Leu Leu Ser Leu
      225      230      235      240
Ser Gln Gly Pro Gln Pro Pro Asn Leu Pro Leu Gly Val Pro Ile Ser
      245      250      255
Ser Pro Gly Phe Lys Leu Leu Leu Arg Gly Gly Trp Glu Pro Gly Met
      260      265      270
Gly Leu Gly Pro Arg Gly Glu Gly Arg Ala Asn Pro Ile Pro Thr Val
      275      280      285
Leu Lys Arg Asp Gln Glu Gly Leu Gly Tyr Arg Ser Ala Pro Gln Pro
      290      295      300
Arg Val Thr His Phe Pro Ala Trp Asp Thr Arg Ala Val Ala Gly Arg
      305      310      315      320
Glu Arg Pro Pro Arg Val Ala Thr Leu Ser Trp Arg Glu Glu Arg Arg
      325      330      335
Arg Glu Glu Lys Asp Arg Ala Trp Glu Arg Asp Leu Arg Thr Tyr Met
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Asn Leu Glu Phe
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&lt;210&gt; 3585

&lt;211&gt; 2782

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3585

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120

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240  
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<210> 3586

<211> 663

<212> PRT

<213> Homo sapiens

<400> 3586

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			20					25					30	
Arg	Ser	Cys	Trp	Arg	Lys	Trp	Lys	Gln	Leu	Ser	Arg	Leu	Gln	Arg
		35					40					45		
Met	Ile	Leu	Phe	Leu	Leu	Ala	Phe	Leu	Leu	Phe	Cys	Gly	Leu	Phe
	50					55				60				
Tyr	Ile	Asn	Leu	Ala	Asp	His	Trp	Lys	Ala	Leu	Ala	Phe	Arg	Leu
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Glu	Glu	Gln	Lys	Met	Arg	Pro	Glu	Ile	Ala	Gly	Leu	Lys	Pro	Ala

													85							90								95		
Pro	Pro	Val	Leu	Pro	Ala	Pro	Gln	Lys	Ala	Asp	Thr	Asp	Pro	Glu	Asn															
			100					105								110														
Leu	Pro	Glu	Ile	Ser	Ser	Gln	Lys	Thr	Gln	Arg	His	Ile	Gln	Arg	Gly															
			115					120								125														
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His	Leu	Asn	Tyr	Arg	Gln	Lys	Gly	Val	Ile	Asp	Val	Phe	Leu	His	Ala															
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			260				265								270															
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Ser	Ala	Tyr	His	Leu	Ser	Gly	Asp	Ser	Leu	Phe	Leu	Arg	Lys	Ala	Glu															
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			370				375								380															
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His	Ser	Glu	Pro	Ser	Lys	Leu	Thr	Phe	Val	Gly	Glu	Leu																		



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545              550              555              560
Arg Pro Glu Thr Val Glu Ser Leu Phe Tyr Leu Tyr Arg Val Thr Gly
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Asp Arg Lys Tyr Gln Asp Trp Gly Trp Glu Ile Leu Gln Ser Phe Ser
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Arg Phe Thr Arg Val Pro Ser Gly Gly Tyr Ser Ser Ile Asn Asn Val
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Gln Asp Pro Gln Lys Pro Glu Pro Arg Asp Lys Met Glu Ser Phe Phe
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&lt;210&gt; 3587

&lt;211&gt; 3148

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3587

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&lt;210&gt; 3588

&lt;211&gt; 499

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3588

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			20					25					30		
Glu	Asp	Val	Gln	Glu	Glu	Thr	Gln	Leu	Asp	Leu	Ser	Gly	Asp	Ser	Val
			35				40					45			
Lys	Thr	Ile	Ala	Lys	Leu	Trp	Asp	Ser	Lys	Met	Phe	Ala	Glu	Ile	Met
			50			55					60				
Met	Lys	Ile	Glu	Glu	Tyr	Ile	Ser	Lys	Gln	Ala	Lys	Ala	Ser	Glu	Val
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			85					90						95	
Asn	Asn	Leu	Thr	Val	Glu	Ile	Glu	Asn	Glu	Leu	Asn	Ile	Ile	His	Lys
			100					105					110		
Phe	Ile	Arg	Asp	Lys	Tyr	Ser	Lys	Arg	Phe	Pro	Glu	Leu	Glu	Ser	Leu
			115				120					125			
Val	Pro	Asn	Ala	Leu	Asp	Tyr	Ile	Arg	Thr	Val	Lys	Glu	Leu	Gly	Asn
			130				135					140			
Ser	Leu	Asp	Lys	Cys	Lys	Asn	Asn	Glu	Asn	Leu	Gln	Gln	Ile	Leu	Thr
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<210> 3589
<211> 675
<212> DNA
<213> Homo sapiens
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<210> 3590

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3590

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			20					25					30		
Asp	Pro	Met	Ser	Pro	Phe	His	Leu	Ser	Ser	Val	Ile	Leu	Cys	Arg	Pro
		35					40					45			
Ser	Ala	Trp	Pro	Cys	Leu	Arg	Ser	Ser	Ser	Pro	Pro	Ala	Ala	Gln	Gly
	50					55					60				
Ser	Phe	Val	Ser	Ala	Gln	Glu	Gly	Pro	Tyr	Asn	Pro	Ser	Trp	Leu	Trp
65					70				75					80	
Pro	Gly	Pro	Cys	Phe	Val	Ser	Glu	Leu	Gly	Gly	Pro	Ile	Pro	Lys	His
			85					90					95		
Trp	Leu	Gly	Asn	Ser	Tyr	Pro	Ile	Cys	Cys	Leu	Gly	Ser	Ala	Trp	Phe
			100					105					110		
Phe	Thr	His	Ile	Ser											
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<210> 3591

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3591

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<210> 3592

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3592

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Ala	Ala	Leu	Gly	Arg	Gly	Arg	Ala	Pro	Ala	Ser	Leu	Gly	Trp	Gln	Arg
		20						25					30		
Lys	Gln	Val	Asn	Trp	Lys	Ala	Cys	Arg	Trp	Ser	Ser	Ser	Gly	Val	Ile
		35					40					45			
Pro	Asn	Glu	Lys	Ile	Arg	Asn	Ile	Gly	Ile	Ser	Ala	His	Ile	Asp	Ser
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Gly	Lys	Thr	Thr	Leu	Thr	Glu	Arg	Val	Leu	Tyr	Tyr	Thr	Gly	Arg	Ile
65					70					75				80	
Ala	Lys	Met	His	Glu	Val	Lys	Gly	Lys	Asp	Gly	Val	Gly	Ala	Val	Met
			85						90					95	
Asp	Ser	Met	Glu	Leu	Glu	Arg	Gln	Arg	Gly	Ile	Thr	Ile	Gln	Ser	Ala
		100						105					110		
Ala	Thr	Tyr	Thr	Met	Trp	Lys	Asp	Val	Asn	Ile	Asn	Ile	Ile	Asp	Thr
	115						120					125			
Pro	Gly	His	Val	Asp	Phe	Thr	Ile	Glu	Val	Glu	Arg	Ala	Leu	Arg	Val
	130					135					140				
Leu	Asp	Gly	Ala	Val	Leu	Val	Leu	Cys	Ala	Val	Gly	Gly	Val	Gln	Cys
145					150					155				160	
Gln	Thr	Met	Thr	Val	Asn	Arg	Gln	Met	Lys	Arg	Tyr	Asn	Val	Pro	Phe
			165						170					175	
Leu	Thr	Phe	Ile	Asn	Lys	Leu	Asp	Arg	Met	Gly	Ser	Asn	Pro	Ala	Arg
		180					185						190		
Ala	Leu	Gln	Gln	Met	Arg	Ser	Lys	Leu	Asn	His	Asn	Ala	Ala	Phe	Met
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 <211> 1005  
 <212> DNA  
 <213> Homo sapiens

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<210> 3594  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<400> 3594  
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 Arg Ser Leu Ala Leu Ala Ala Ala Pro Ser Ser Asn Gly Ser Pro Trp  
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 Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

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Glu	Asn	Gln	Arg	Leu	Ala	Lys	Lys	Lys	Ala	Asp	Leu	His	Asp	Glu	Glu
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		115					120					125			
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Val	Leu	Leu	Val	Arg	Glu	Lys	Phe	Gly	Asp	Gln	Asp	Val	Trp	Ile	Leu
			165						170					175	
Pro	Gln	Ala	Glu	Trp	Gln	Pro	Gly	Glu	Thr	Leu	Arg	Gly	Thr	Ala	Glu
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			245						250				255		
Trp	Val	Thr	Lys	Asp	Glu	Leu	Gly	Asp	Tyr	Leu	Lys	Pro	Lys	Tyr	Leu
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&lt;210&gt; 3595

&lt;211&gt; 1903

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3595

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120

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180

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240

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300

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360

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420

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480

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540



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&lt;210&gt; 3596

&lt;211&gt; 496

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3596

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Gln Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu			
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Val Glu Ser Tyr Ile Gly Phe Ile Glu Ser Tyr Arg Asp Pro Phe Gly			
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Ser Arg Gly Glu Phe Glu Gly Phe Val Ala Val Val Asn Lys Ala Met			
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Glu Leu Pro Trp Pro Pro Thr Phe Glu Lys Asp Lys Phe Leu Thr Pro			
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Phe Lys Asn Val Ser Leu Gly Asn Val Leu Ala Val Ala Tyr Ala Thr			
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Ile Leu Trp Lys Gly Pro Ser Phe Asp Val Gln Val Gly Leu His Glu			
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Leu Leu Gly His Gly Ser Gly Lys Leu Phe Val Gln Asp Glu Lys Gly			
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Gln Ile Gln Ser Trp Tyr Arg Ser Gly Glu Thr Trp Asp Ser Lys Phe			
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Leu Tyr Leu Cys Leu His Pro Gln Val Leu Glu Ile Phe Gly Phe Glu			
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Gly Ala Asp Ala Glu Asp Val Ile Tyr Val Asn Trp Leu Asn Met Val			
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Trp Arg Gln Ala His Met Gln Ala Arg Phe Val Ile Leu Arg Val Leu			
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Ser Val Gly Lys Pro Ala Leu Glu Arg Phe Leu Arg Arg Leu Gln Val			
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Leu Lys Ser Thr Gly Asp Val Ala Gly Gly Arg Ala Leu Tyr Glu Gly			
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Tyr Ala Thr Val Thr Asp Ala Pro Pro Glu Cys Phe Leu Thr Leu Arg			
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Asp Thr Val Leu Leu Arg Lys Glu Ser Arg Lys Leu Ile Val Gln Pro			
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Asn Thr Arg Leu Glu Gly Asn Gly Ser Asp Val Gln Leu Leu Glu Tyr			

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						Arg
						Ser
						Phe
						Ser
						Glu
						Arg
						Phe
						Pro
	450		455		460	
Glu	Asp	Gly	Pro	Glu	Leu	Glu
						Ile
						Leu
						Thr
						Gln
						Leu
						Ala
						Thr
						Ala
465			470		475	480
Asp	Ala	Arg	Phe	Trp	Lys	Gly
						Pro
						Ser
						Glu
						Ala
						Pro
						Ser
						Gly
						Gln
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&lt;210&gt; 3597

&lt;211&gt; 1090

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3597

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&lt;210&gt; 3598

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 85 90 95  
 Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu  
 100 105 110  
 Asp Val Gln Asn Leu Arg Gln Leu Arg Tyr Glu Glu Met Gln Lys Ile  
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 <212> DNA  
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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		20					25					30			
Met	Val	Glu	Val	Arg	Ser	Trp	Ser	Gly	Ser	Leu	Val	Gly	Trp	Leu	Ala
	35					40					45				
Pro	Arg	Pro	Leu	Ser	Val	Pro	Ile	Glu	His	Leu	Leu	Gly	Ala	Lys	Asn
	50				55					60					
Cys	Cys	Arg	His	Gly	Gly	Gln	Trp	Val	Arg	Arg	Ala	Val	Pro	Ala	Val
65				70					75				80		
Leu	Ser	Leu	Val	Gly	Ala	Ser	Ser	Leu	His	His	Ala	Val	Tyr	Leu	Phe
			85					90					95		
Leu	Leu														

<210> 3601

<211> 2963

<212> DNA

<213> Homo sapiens

<400> 3601

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<210> 3602

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3602

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Glu	Ala	Arg	Glu	Leu	Met	Tyr	Ser	Gly	Ala	Leu	Leu	Phe	Phe	Ser	His
			35				40					45			
Gly	Gln	Gln	Asn	Ser	Ala	Ala	Asp	Leu	Ser	Met	Leu	Val	Leu	Glu	Ser
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Leu	Glu	Lys	Ala	Glu	Val	Glu	Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu
65					70				75					80	
Ala	Lys	Val	Phe	Ser	Leu	Met	Asp	Pro	Asn	Ser	Pro	Glu	Arg	Val	Thr
			85					90						95	
Phe	Val	Ser	Arg	Ala	Leu	Lys	Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu
			100					105					110		
Gly	His	Pro	Arg	Leu	His	Gln	Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu
			115			120					125				
Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly
			130			135					140				
Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe
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Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu
			165					170						175	
Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr
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 <211> 146  
 <212> PRT  
 <213> Homo sapiens

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 Gly Gly Ser Gln Glu Lys Arg Gly Arg Pro Ser Gln Glu Pro Pro Leu  
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 Ala Pro Pro His Arg Arg Arg Arg Ser Arg Gln His Pro Gly Pro Leu  
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 <211> 2004  
 <212> DNA  
 <213> Homo sapiens

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1380  
ctggccctcg gacctgagag ccagccagg gcccatgtgg tctgcaaag ggagcggtg  
1440  
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1500  
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1560  
tacgggtact tgcagctgtg tcccatgtgg catcccagag ctgcgcctg ctggtctctg  
1620  
tgagcgccac gctgctgtgc tggaaatgcc gctttaaaaa gggataccgt gggactctgc  
1680  
ccgtctcttt cataacgcaa tatttatttg tattgggtga cgattgattc tttcgacct  
1740  
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1800  
ctactccaaa tgttaccaga acgatgacaa aaggggagac gctctatttt ttcacagtta  
1860  
aatgacagtt gtagattgat acgcagttgt gcatgggaag gggaaaacga cagctttatt  
1920  
tactgtaaaag tggattttca ggaaggcttg tgtgaaccgt tgcgcataaa taaaccctt  
1980  
ctaccgggca aaaaaaaaaa aaaa  
2004

&lt;210&gt; 3606

&lt;211&gt; 324

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3606

```

Xaa Arg Arg Arg Trp Pro Ser Arg Arg Ala Pro Ala Thr Ala Ala Gln
 1           5           10           15
Pro Arg Gly Val Gln Arg Val Glu Gly Lys Leu Arg Ala Ser Val Glu
      20           25           30
Lys Gly Asp Tyr Tyr Glu Ala His Gln Met Tyr Arg Thr Leu Phe Phe
      35           40           45
Arg Tyr Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr
      50           55           60
Ser Gly Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala
      65           70           75           80
Asp Leu Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu
      85           90           95
Val Ala Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met
      100          105          110
Asp Pro Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys
      115          120          125
Trp Ser Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln
      130          135          140
Leu Leu Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg
      145          150          155          160
Tyr His Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu
      165          170          175
Val Glu Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe
      180          185          190
Val Ala Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser
      195          200          205
Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu
      210          215          220
Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu
      225          230          235          240
Leu Leu Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys
      245          250          255
Glu Gln Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr
      260          265          270
Leu Asp Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr
      275          280          285
Ser Ser Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly
      290          295          300
Ser Ser Glu Gln Glu Asp Gly Glu Glu Ser Pro Ser Asp Gly Ser Pro
      305          310          315          320
Ile Glu Leu Asp

```

&lt;210&gt; 3607

&lt;211&gt; 1726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3607

nacgcgtcgt gggagttggt ggaccccaca cggacttgc aggcactggt tgttcagttt  
60  
aacgaccaat tcttctgggg ccagctggag gccgtcgagg tgaagtggag cgtgcgaatg  
120  
accctgtgtg ctgggatatg cagctatgaa ggggaaggtg gaatgtgttc catccgtctc  
180  
agcgaacccc ttttgaagtt gaggccaaga aaggatcttg tagagaccct cctgcatgaa  
240  
atgatacatg cctattttatt tgtcactaat aacgacaaag accgagaagg gcatgggtcca  
300  
gaattttgta aacatatgca tcgcatcaac agcctgactg gagccaatat aacgggtatac  
360  
catacttttc acgatgaggt ggatgagtat cggcgacact ggtggcgctg caatgggccc  
420  
tgccagcaca ggccaccgta ttacggctat gtcaaacgag ctactaacag ggaaccctct  
480  
gctcatgact attggtgggc tgagcaccag aaaacctgtg gaggcactta cataaaaaatc  
540  
aaggaaccag agaattactc aaaaaaaggc aaaggaaagg caaaactagg aaaggaacca  
600  
gtattggccg cagagaataa agataaacc aacagaggtg aggccagct agtaatccct  
660  
tttagtggga aaggatatgt tctaggagaa acaagcaatt taccttcacc tgggaaactg  
720  
atcacttcac atgccattaa taaaacccaa gatcttttaa atcaaaacca ttcagcaaat  
780  
gctgtaagac ctaattctaa aatcaaggtg aaatttgaac agaattggtc aagtaaaaat  
840  
tctcatctgg tctcccctgc tgtagtaac agtcaccaa atgttctaag caactacttt  
900  
cctagagtat catttgccaa ccaaaaggct ttcagaggtg tgaatggatc tccaaggata  
960  
agtgtaacag ttggcaacat ccctaaaaac tcagtctctt ctagtctca gagaagggtt  
1020  
tcatcttcta agatatccct aagaaattct tcaaaagtaa cggaatcagc atctgtgatg  
1080  
ccatcccagg atgtgagtgg gtctgaagat acattcccaa ataaacgacc taggctagaa  
1140  
gataagactg tttttgacaa tttttttatc aagaaagagc aaataaaaaag cagtggtaat  
1200  
gatccaaagt atagtacaac cacagctcag aattccagca gttcatccag tcagagcaaa  
1260  
atggttaatt gccagtttg tcagaatgaa gttctgggag tctcagatta atgagcactt  
1320  
ggactgggtc cttgaaggtg acagcatcaa agtcaaaagc gaagaaagtc tttgaaaaag  
1380  
gtttc aaagt ctcaagtacc acctgtatta tctcactaat gtgctatgtc agccagtcag  
1440  
gaagttctgg ttaatactaa gatttgtagg ttataatcta gttcacataa ccaatagaaa  
1500  
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1560  
gtgtacatt cactcttgcc ttaggtatac tgtaaccag gttctgcctg tcgtgtataa  
1620

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 1726

<210> 3608

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3608

Xaa	Ala	Ser	Trp	Glu	Leu	Val	Asp	Pro	Thr	Pro	Asp	Leu	Gln	Ala	Leu
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Phe	Val	Gln	Phe	Asn	Asp	Gln	Phe	Phe	Trp	Gly	Gln	Leu	Glu	Ala	Val
		20						25				30			
Glu	Val	Lys	Trp	Ser	Val	Arg	Met	Thr	Leu	Cys	Ala	Gly	Ile	Cys	Ser
		35					40					45			
Tyr	Glu	Gly	Lys	Gly	Gly	Met	Cys	Ser	Ile	Arg	Leu	Ser	Glu	Pro	Leu
	50					55					60				
Leu	Lys	Leu	Arg	Pro	Arg	Lys	Asp	Leu	Val	Glu	Thr	Leu	Leu	His	Glu
65					70					75				80	
Met	Ile	His	Ala	Tyr	Leu	Phe	Val	Thr	Asn	Asn	Asp	Lys	Asp	Arg	Glu
			85					90						95	
Gly	His	Gly	Pro	Glu	Phe	Cys	Lys	His	Met	His	Arg	Ile	Asn	Ser	Leu
			100					105						110	
Thr	Gly	Ala	Asn	Ile	Thr	Val	Tyr	His	Thr	Phe	His	Asp	Glu	Val	Asp
	115						120					125			
Glu	Tyr	Arg	Arg	His	Trp	Trp	Arg	Cys	Asn	Gly	Pro	Cys	Gln	His	Arg
	130					135					140				
Pro	Pro	Tyr	Tyr	Gly	Tyr	Val	Lys	Arg	Ala	Thr	Asn	Arg	Glu	Pro	Ser
145					150					155				160	
Ala	His	Asp	Tyr	Trp	Trp	Ala	Glu	His	Gln	Lys	Thr	Cys	Gly	Gly	Thr
			165						170					175	
Tyr	Ile	Lys	Ile	Lys	Glu	Pro	Glu	Asn	Tyr	Ser	Lys	Lys	Gly	Lys	Gly
		180						185					190		
Lys	Ala	Lys	Leu	Gly	Lys	Glu	Pro	Val	Leu	Ala	Ala	Glu	Asn	Lys	Asp
	195						200					205			
Lys	Pro	Asn	Arg	Gly	Glu	Ala	Gln	Leu	Val	Ile	Pro	Phe	Ser	Gly	Lys
	210					215					220				
Gly	Tyr	Val	Leu	Gly	Glu	Thr	Ser	Asn	Leu	Pro	Ser	Pro	Gly	Lys	Leu
225					230					235				240	
Ile	Thr	Ser	His	Ala	Ile	Asn	Lys	Thr	Gln	Asp	Leu	Leu	Asn	Gln	Asn
			245						250					255	
His	Ser	Ala	Asn	Ala	Val	Arg	Pro	Asn	Ser	Lys	Ile	Lys	Val	Lys	Phe
			260					265					270		
Glu	Gln	Asn	Gly	Ser	Ser	Lys	Asn	Ser	His	Leu	Val	Ser	Pro	Ala	Val
	275						280					285			
Ser	Asn	Ser	His	Gln	Asn	Val	Leu	Ser	Asn	Tyr	Phe	Pro	Arg	Val	Ser
	290					295					300				
Phe	Ala	Asn	Gln	Lys	Ala	Phe	Arg	Gly	Val	Asn	Gly	Ser	Pro	Arg	Ile
305					310					315				320	
Ser	Val	Thr	Val	Gly	Asn	Ile	Pro	Lys	Asn	Ser	Val	Ser	Ser	Ser	Ser
			325						330					335	
Gln	Arg	Arg	Val	Ser	Ser	Ser	Lys	Ile	Ser	Leu	Arg	Asn	Ser	Ser	Lys

```

          340          345          350
Val Thr Glu Ser Ala Ser Val Met Pro Ser Gln Asp Val Ser Gly Ser
          355          360          365
Glu Asp Thr Phe Pro Asn Lys Arg Pro Arg Leu Glu Asp Lys Thr Val
          370          375          380
Phe Asp Asn Phe Phe Ile Lys Lys Glu Gln Ile Lys Ser Ser Gly Asn
385          390          395          400
Asp Pro Lys Tyr Ser Thr Thr Thr Ala Gln Asn Ser Ser Ser Ser Ser
          405          410          415
Ser Gln Ser Lys Met Val Asn Cys Pro Val Cys Gln Asn Glu Val Leu
          420          425          430
Gly Val Ser Asp
          435

```

&lt;210&gt; 3609

&lt;211&gt; 1286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3609

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ntcttgcaact taagttgccc ttgaagatgg ttntgccttg ggcctggaac cccgagggag
60
ttcagcttca ccaaatcatc ccaagctttc cgtgcactga gagacatgct ggccgtggcc
120
tgctcaacc agtgggagca gctgaggggg ccgggtggca acgaggatgg gccacagaag
180
ctggacttgg aagctgatgc tgagcccaaa gacctcgaga gtacgaacct cttggagagt
240
gaagctccca gggactatct cctcaagttt gcctatattg tggatttggg cagcgacaca
300
gcagacaagt tcctgcagct gntttggaac caaagggtgc aagagggtgc tgtgtcctat
360
caannctacc ccttgtcgcc caccgccttc acccattgtg agcagggtgc gggcgagggt
420
ggcctggacc gaggcaccta ctactgggag gtggagatta tcgagggtgc ggtcagcatg
480
ggggtcatgg ccgcagactt ctccccacaa gagccctacg accgcggccg gctgggcccgc
540
aacgcccact cctgctgcct gcagtgggat ggacgcagct tctccgtctg gtttcatggg
600
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660
gaccgtgcct tggccttcta tgctgtacgg gacggcaaga tgagcctcct gcggaggctg
720
aaggcctccc ggccccgcgg ggggtggcat ccggcctccc ccattgaccc cttccagagc
780
cgctggaca gtcactttgc ggggctcttc acccacagac tcaagcctgc cttcttctcg
840
gagagtgtgg acgcccactt gcagatcggg cccctcaaga agtcctgcat atccgtgctg
900
aagaggaggt gatgccgggc acgggcgctc ctgctgccgt ctctgctcca ggaagctgcc
960
tcctctgggc cctctccttc gtctgggaag gcaccagcat ggtcccaca caccagcct
1020

```

tctcatttct agaggcttcc acctttttat acactcagcc ttccctctcc caggcaggag  
 1080  
 gacccccaga cctgttccc ctgcagacct cacttctggg agacagagct acagctggga  
 1140  
 cagctccaag ctaccctaac cctcctttc ccaggtttct agaatagtgt ctggcatgta  
 1200  
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 1260  
 ccgctaattt agtagtagta gtaggc  
 1286

<210> 3610

<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

Met	Leu	Ala	Val	Ala	Cys	Val	Asn	Gln	Trp	Glu	Gln	Leu	Arg	Gly	Pro	1	5	10	15
Gly	Gly	Asn	Glu	Asp	Gly	Pro	Gln	Lys	Leu	Asp	Leu	Glu	Ala	Asp	Ala	20	25	30	
Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro	35	40	45	
Arg	Asp	Tyr	Phe	Leu	Lys	Phe	Ala	Tyr	Ile	Val	Asp	Leu	Asp	Ser	Asp	50	55	60	
Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu	65	70	75	80
Gly	Ala	Val	Ser	Tyr	Gln	Xaa	Tyr	Pro	Leu	Ser	Pro	Thr	Arg	Phe	Thr	85	90	95	
His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr	100	105	110	
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met	115	120	125	
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly	130	135	140	
Arg	Asn	Ala	His	Ser	Cys	Cys	Leu	Gln	Trp	Asn	Gly	Arg	Ser	Phe	Ser	145	150	155	160
Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro	165	170	175	
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr	180	185	190	
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser	195	200	205	
Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln	210	215	220	
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys	225	230	235	240
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro	245	250	255	
Leu	Lys	Lys	Ser	Cys	Ile	Ser	Val	Leu	Lys	Arg	Arg					260	265		

<210> 3611

<211> 816

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3611

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 agctacaaag ggatcttcca gtatgactac catgataaag tgaagccaag aaagatattc  
 120  
 caatggagac agttggaaaa cctgtacttc agagaaaaga agttttccgt ggaagttcat  
 180  
 gacccacgca gggcttcagt gacaaggagg acgtttgggc acagcggcat tgcagtgcac  
 240  
 acgtggtatg catgtccggc attgatcaag tccatctggg ctatggccat aagccaacac  
 300  
 cagttctatc tggacagaaa gcagagtaag tccaaaatcc atgcagcacg cagcctgagt  
 360  
 gagatcgcca tcgacctgac cgagacgggg acgctgaaga cctcgaagct ggccaacatg  
 420  
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 480  
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 540  
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 600  
 gaagctgagc tcacgggcaa gctgccagta gaatatcccc tggatccagg ggaggaacca  
 660  
 cccattgttc ggagaagaat aggaacagcc ttcaactgg atgaacagaa aatcctgccc  
 720  
 aaaggagagg aagctgaact ggaacgcctg gaacgagagt ttgccattca gtcccagatt  
 780  
 acggaggccg cccgccgcct agccagtgaac cccaac  
 816

&lt;210&gt; 3612

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3612

Tyr Gly Val His Tyr Tyr Ala Val Lys Asp Lys Gln Gly Ile Pro Trp  
 1 5 10 15  
 Trp Leu Gly Leu Ser Tyr Lys Gly Ile Phe Gln Tyr Asp Tyr His Asp  
 20 25 30  
 Lys Val Lys Pro Arg Lys Ile Phe Gln Trp Arg Gln Leu Glu Asn Leu  
 35 40 45  
 Tyr Phe Arg Glu Lys Lys Phe Ser Val Glu Val His Asp Pro Arg Arg  
 50 55 60  
 Ala Ser Val Thr Arg Arg Thr Phe Gly His Ser Gly Ile Ala Val His  
 65 70 75 80  
 Thr Trp Tyr Ala Cys Pro Ala Leu Ile Lys Ser Ile Trp Ala Met Ala  
 85 90 95  
 Ile Ser Gln His Gln Phe Tyr Leu Asp Arg Lys Gln Ser Lys Ser Lys  
 100 105 110  
 Ile His Ala Ala Arg Ser Leu Ser Glu Ile Ala Ile Asp Leu Thr Glu



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<210> 3613
<211> 659
<212> DNA
<213> Homo sapiens
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<210> 3614
<211> 123
<212> PRT
<213> Homo sapiens
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&lt;400&gt; 3614

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Met Gln Ser Val Thr Arg Pro Gly Ile Pro Met Cys Ala Gln Leu Ala
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His Ser Ile Ile Val Pro Arg Lys Leu Leu Gln Phe Ile Lys Ser Ser
      20           25           30
Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
      35           40           45
Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
      50           55           60
Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
      65           70           75           80
Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
      85           90           95
Arg Ala Arg Ile Ser Gly Arg Ala His Thr His Ser Tyr Thr Arg Thr
      100          105          110
Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro Pro
      115          120

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&lt;210&gt; 3615

&lt;211&gt; 1388

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3615

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agccggtacc ggcaaccacg ggcagctctc agggaaatctc cgtcgtgagg ccagaggctc
120
cagtccccgc gagtccagat gcctgtccag cctccaagca aagacacaga agagatggaa
180
gcagagggtg attctgctgc tgagatgaat ggggaggagg aagagagtga ggaggagcgg
240
agcggcagcc agacagagtc agaagaggag agctccgaga tggatgatga ggactatgag
300
cgacgccgca gcgagtgtgt cagtgagatg ctggacctag agaagcagtt ctcgagagta
360
aaggagaagt tgttcaggga acgactgagt cagctgcggt tgcggctgga ggaagtgggg
420
gctgagagag ccctgaata cacggagccc cttggggggc tgcagcggag cctcaagatt
480
cgcatcagg tggcagggat ctacaagggc ttctgtctgg atgtgatcag gaataagtac
540
gaatgtgagc tgcagggagc caaacagcac ctggagagtg agaagctgct gctctatgac
600
acgtgcagg gggagctgca ggagcggatc cagaggctgg aggaggaccg ccagagcctg
660
gacctcagct ctgaatggtg ggacgacaaa ctgcacgcca gaggcagctc caggtcttgg
720
gactccctgc cgcccagcaa gaggaagaag gcacctctgg tttctggccc atacatcgtg
780
tacatgcttc aagagatcgg catcctggag gactggacag ccatcaaaaa ggctagggca
840
gctgtgtccc ctcaagaag aaaatcggat gacaggcgga cccacaggcc cctcagggtc
900

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tgcccagcca ggctcctgtg gtgctgctgg gccctccac tccatctggc actggcctgg  
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 1020  
 gcaaggetgc tgtctccatc cctgagccgc ctgccacctc ccactcctga agatccatct  
 1080  
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 1140  
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 1200  
 agtcagacgt gattatctgg gggctctgtcc accctggctg gatctggagg caagatgccca  
 1260  
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 1380  
 aaaaaaaaaa  
 1388

<210> 3616

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3616

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Gly	Asp	Ser	Ala	Ala	Glu	Met	Asn	Gly	Glu	Glu	Glu	Glu	Ser	Glu	Glu
			20					25					30		
Glu	Arg	Ser	Gly	Ser	Gln	Thr	Glu	Ser	Glu	Glu	Glu	Ser	Ser	Glu	Met
			35				40					45			
Asp	Asp	Glu	Asp	Tyr	Glu	Arg	Arg	Arg	Ser	Glu	Cys	Val	Ser	Glu	Met
			50				55				60				
Leu	Asp	Leu	Glu	Lys	Gln	Phe	Ser	Glu	Leu	Lys	Glu	Lys	Leu	Phe	Arg
65					70					75				80	
Glu	Arg	Leu	Ser	Gln	Leu	Arg	Leu	Arg	Leu	Glu	Glu	Val	Gly	Ala	Glu
				85					90					95	
Arg	Ala	Pro	Glu	Tyr	Thr	Glu	Pro	Leu	Gly	Gly	Leu	Gln	Arg	Ser	Leu
			100					105					110		
Lys	Ile	Arg	Ile	Gln	Val	Ala	Gly	Ile	Tyr	Lys	Gly	Phe	Cys	Leu	Asp
			115					120				125			
Val	Ile	Arg	Asn	Lys	Tyr	Glu	Cys	Glu	Leu	Gln	Gly	Ala	Lys	Gln	His
			130				135				140				
Leu	Glu	Ser	Glu	Lys	Leu	Leu	Leu	Tyr	Asp	Thr	Leu	Gln	Gly	Glu	Leu
145					150					155				160	
Gln	Glu	Arg	Ile	Gln	Arg	Leu	Glu	Glu	Asp	Arg	Gln	Ser	Leu	Asp	Leu
				165					170					175	
Ser	Ser	Glu	Trp	Trp	Asp	Asp	Lys	Leu	His	Ala	Arg	Gly	Ser	Ser	Arg
			180					185					190		
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<211> 159

<212> PRT

<213> Homo sapiens

<400> 3620

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<211> 2934

<212> DNA

<213> Homo sapiens

<400> 3621

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<212> PRT

<213> Homo sapiens

<400> 3622

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Ser	Lys	Leu	Glu	Thr	Met	Gln	Thr	Ala	Glu	Ser	Glu	Ser	Ala	Met	Glu
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Ser	His	Ser	Leu	Leu	Asn	Pro	Asn	Leu	Gln	Gln	Gly	Glu	Gly	Val	Leu



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&lt;210&gt; 3623

&lt;211&gt; 586

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3623

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&lt;210&gt; 3624

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3624

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 Glu Lys Lys Arg Met Asp Lys Ala Ile Gly Tyr Ser Phe Ala Ile Val  
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Trp	Ile	Glu	Glu	Asp	Pro	Met	Asp	Ile	Met	Glu	Phe	Asn	Arg	Val	Arg				
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Glu	Lys	Phe	Arg	Lys	Arg	Ile	Ile	Lys	Gln	Leu	Gln	Asn	Pro	Asp	Met				
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<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

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			20					25					30		
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			35				40					45			
Asn	Val	Val	Ala	Phe	Ser	Glu	Ile	Met	Ser	Met	Ile	Trp	Lys	Arg	Leu
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	65				70				75					80	
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Lys	Glu	Asn	Met	Tyr	Ala	Val	Gln	Thr	Leu	Lys	Asp	Phe	Gln	Tyr	Val
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			165					170						175	
Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu	Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu
			180					185					190		
Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp	Gln	Glu	Glu	Arg	Ile	Arg	Arg	Gly
			195				200					205			
Asp	Asp	Leu	Arg	Leu	Gln	Met	Ala	Ile	Glu	Glu	Ser	Lys	Arg	Glu	Thr
	210					215						220			
Gly	Gly	Lys	Glu	Glu	Ser	Ser	Leu	Met	Asp	Leu	Ala	Asp	Val	Phe	Thr
	225				230					235				240	
Ala	Pro	Ala	Pro	Ala	Pro	Thr	Thr	Asp	Pro	Trp	Gly	Gly	Pro	Ala	Pro
			245					250						255	
Met	Ala	Ala	Ala	Val	Pro	Thr	Ala	Ala	Pro	Thr	Ser	Asp	Pro	Trp	Gly

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                260                265                270
Gly Pro Pro Val Pro Pro Ala Ala Asp Pro Trp Gly Gly Pro Ala Pro
      275                280                285
Thr Pro Ala Ser Gly Asp Pro Trp Arg Pro Ala Ala Pro Ala Gly Pro
      290                295                300
Ser Val Asp Pro Trp Gly Gly Thr Pro Ala Pro Ala Ala Gly Glu Gly
305                310                315                320
Pro Thr Pro Asp Pro Trp Gly Ser Ser Asp Gly Gly Val Pro Val Ser
      325                330                335
Gly Pro Ser Ala Ser Asp Pro Trp Thr Pro Ala Pro Ala Phe Ser Asp
      340                345                350
Pro Trp Gly Gly Ser Pro Ala Lys Pro Ser Thr Asn Gly Thr Thr Thr
      355                360                365
Ala Gly Gly Phe Asp Thr Glu Pro Asp Glu Phe Ser Asp Phe Asp Arg
      370                375                380
Leu Arg Thr Ala Leu Pro Thr Ser Gly Ser Ser Ala Gly Glu Leu Glu
385                390                395                400
Leu Leu Ala Gly Glu Val Pro Ala Arg Ser Pro Gly Ala Phe Asp Met
      405                410                415
Ser Gly Val Arg Gly Ser Leu Ala Glu Ala Val Gly Ser Pro Pro Pro
      420                425                430
Ala Ala Thr Pro Thr Pro Thr Pro Pro Thr Arg Lys Thr Pro Glu Ser
      435                440                445
Phe Leu Gly Pro Asn Ala Ala Leu Val Asp Leu Asp Ser Leu Val Ser
      450                455                460
Arg Pro Gly Pro Thr Pro Pro Gly Ala Lys Ala Ser Asn Pro Phe Leu
465                470                475                480
Pro Gly Gly Gly Pro Ala Thr Gly Pro Ser Val Thr Asn Pro Phe Gln
      485                490                495
Pro Ala Pro Pro Ala Thr Leu Thr Leu Asn Gln Leu Arg Leu Ser Pro
      500                505                510
Val Pro Pro Val Pro Gly Ala Pro Pro Thr Tyr Ile Ser Pro Leu Gly
      515                520                525
Gly Gly Pro Gly Leu Pro Pro Met Met Pro Pro Gly Pro Pro Ala Pro
      530                535                540
Asn Thr Asn Pro Phe Leu
545                550

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&lt;210&gt; 3627

&lt;211&gt; 1760

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3627

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180
gatatggaag aatttcattg caggactttg cacgatgacg acagctgtca ggtgattcca
240
gttcttccac aagtgatgat gatcctgatt cccggacaga cattacctct tcagcttttt
300

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caccctcaag aagtcagtat ggtgcggaat ttaattcaga aagatagaac ctttgctgtt  
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420  
gcctatcgag aagaacagga ttttggaatt gagatagtga aagtgaagc aattggaaga  
480  
caaagggttca aagtccttga gctaagaaca cagtcagatg gaatccagca agctaaagt  
540  
caaattcttc ccgaatgtgt gttgccttca accatgtctg cagttcaatt agaatccctc  
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aataagtgcc agatatttcc ttcaaacct gtctcaagag aagaccaatg ttcataataa  
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780  
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1560  
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&lt;210&gt; 3628

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3628

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 Pro Leu Leu Pro Ala Glu Ser Glu Glu Glu Asp Glu Met Glu Val Glu  
 20 25 30  
 Asp Gln Asp Ser Lys Glu Ala Lys Lys Pro Asn Ile Ile Asn Phe Asp  
 35 40 45  
 Thr Ser Leu Pro Thr Ser His Thr Tyr Leu Gly Ala Asp Met Glu Glu  
 50 55 60  
 Phe His Gly Arg Thr Leu His Asp Asp Asp Ser Cys Gln Val Ile Pro  
 65 70 75 80  
 Val Leu Pro Gln Val Met Met Ile Leu Ile Pro Gly Gln Thr Leu Pro  
 85 90 95  
 Leu Gln Leu Phe His Pro Gln Glu Val Ser Met Val Arg Asn Leu Ile  
 100 105 110  
 Gln Lys Asp Arg Thr Phe Ala Val Leu Ala Tyr Ser Asn Val Gln Glu  
 115 120 125  
 Arg Glu Ala Gln Phe Gly Thr Thr Ala Glu Ile Tyr Ala Tyr Arg Glu  
 130 135 140  
 Glu Gln Asp Phe Gly Ile Glu Ile Val Lys Val Lys Ala Ile Gly Arg  
 145 150 155 160  
 Gln Arg Phe Lys Val Leu Glu Leu Arg Thr Gln Ser Asp Gly Ile Gln  
 165 170 175  
 Gln Ala Lys Val Gln Ile Leu Pro Glu Cys Val Leu Pro Ser Thr Met  
 180 185 190  
 Ser Ala Val Gln Leu Glu Ser Leu Asn Lys Cys Gln Ile Phe Pro Ser  
 195 200 205  
 Lys Pro Val Ser Arg Glu Asp Gln Cys Ser Tyr Lys Trp Trp Gln Lys  
 210 215 220  
 Tyr Gln Lys Arg Lys Phe His Cys Ala Asn Leu Thr Ser Trp Pro Arg  
 225 230 235 240  
 Trp Leu Tyr Ser Leu Tyr Asp Ala Glu Thr Leu Met Asp Arg Ile Lys  
 245 250 255  
 Lys Gln Leu Arg Glu Trp Asp Glu Asn Leu Lys Asp Asp Ser Leu Pro  
 260 265 270  
 Ser Asn Pro Ile Asp Phe Ser Tyr Arg Val Ala Ala Cys Leu Pro Ile  
 275 280 285  
 Asp Asp Val Leu Arg Ile Gln Leu Leu Lys Ile Gly Ser Ala Ile Gln  
 290 295 300  
 Arg Leu Arg Cys Glu Leu Asp Ile Met Asn Lys Cys Thr Ser Leu Cys  
 305 310 315 320  
 Cys Lys Gln Cys Gln Glu Thr Glu Ile Thr Thr Lys Asn Glu Ile Phe  
 325 330 335  
 Ser Leu Ser Leu Cys Gly Pro Met Ala Ala Tyr Val Asn Pro His Gly  
 340 345 350  
 Tyr Val His Glu Thr Leu Thr Val Tyr Lys Ala Cys Asn Leu Asn Leu  
 355 360 365  
 Ile Gly Arg Pro Ser Thr Glu His Ser Trp Phe Pro Gly Tyr Ala Trp  
 370 375 380  
 Thr Val Ala Gln Cys Lys Ile Cys Ala Ser His Ile Gly Trp Lys Phe  
 385 390 395 400  
 Thr Ala Thr Lys Lys Asp Met Ser Pro Gln Lys Phe Trp Gly Leu Thr



405 410 415  
 Arg Ser Ala Leu Leu Pro Thr Ile Pro Asp Thr Glu Asp Glu Ile Ser  
 420 425 430  
 Pro Asp Lys Val Ile Leu Cys Leu  
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<210> 3629  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 360  
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 420  
 gaaggtcaga gcagcgtcc gagggaggag ttgcttagat tacataacgg ggctcctcca  
 480  
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 600  
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<210> 3630  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 3630  
 Thr Arg Pro Leu Ser Gly Leu Val Trp Val Ala Leu Leu Ala Leu Gly  
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 His Ala Phe Leu Phe Thr Gly Gly Val Val Ser Ala Trp Asp Gln Val  
 20 25 30  
 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu  
 35 40 45  
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His  
 50 55 60  
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<400> 3632
Met Gln Tyr Leu Glu Lys Arg Lys Asn Pro Val Cys His Phe Val Thr
  1             5             10             15
Pro Leu Asp Gly Ser Val Asp Val Asp Glu His Arg Arg Pro Glu Ala

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 Ile Thr Thr Glu Gly Lys Tyr Trp Lys Ser Arg Ile Glu Ile Val Ile  
 35 40 45  
 Arg Glu Tyr His Lys Trp Arg Thr Tyr Phe Lys Lys Arg Leu Gln Gln  
 50 55 60  
 His Lys Asp Glu Asp Leu Ser Ser Leu Val Gln Asp Asp Asp Met Leu  
 65 70 75 80  
 Tyr Trp His Lys His Gly Asp Gly Trp Lys Thr Pro Val Pro Met Glu  
 85 90 95  
 Glu Asp Pro Leu Leu Asp Thr Asp Met Leu Met Ser Glu Phe Ser Asp  
 100 105 110  
 Thr Leu Phe Ser Thr Leu Ser Ser His Gln Pro Val Ala Trp Pro Asn  
 115 120 125  
 Pro Arg Glu Ile Ala His Leu Gly Asn Ala Asp Met Ile Gln Pro Gly  
 130 135 140  
 Leu Ile Pro Leu Gln Pro Asn Leu Asp Phe Met Asp Thr Phe Glu Pro  
 145 150 155 160  
 Phe Gln Asp Leu Phe Ser Ser Ser Arg Ser Ile Phe Gly Ser Met Leu  
 165 170 175  
 Pro Ala Ser Ala Ser Ala Pro Val Pro Asp Pro Asn Asn Pro Pro Ala  
 180 185 190  
 Gln Glu Ser Ile Leu Pro Thr Thr Ala Leu Pro Thr Val Ser Leu Pro  
 195 200 205  
 Asp Ser Leu Ile Ala Pro Pro Thr Ala Pro Ser Leu Ala Arg  
 210 215 220

&lt;210&gt; 3633

&lt;211&gt; 1570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3633

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 180  
 ctgtgtgaag atggcatttc tcaactgatta ttggaaaagc acaagagcca cgtgctggag  
 240  
 ccattgtcca gccttgccct ggaggagcag tgtctggctt tgtccctaga ttggtccact  
 300  
 gggaaaactg gaagggccgg ggaccagccc ttgaagatca tcagcagtga ctccacaggg  
 360  
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 660

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 960  
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 1380  
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 aaaaaaaaaa  
 1570

&lt;210&gt; 3634

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3634

Met	Val	Asn	Glu	Thr	Arg	Pro	Arg	Leu	Gln	Lys	Val	Ala	Ser	Trp	Gln
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Ala	His	Gln	Phe	Glu	Ala	Trp	Ile	Ala	Ala	Phe	Asn	Tyr	Trp	His	Pro
		20					25						30		
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
	35					40						45			
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
	50				55					60					
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65				70					75					80	
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
			85					90						95	
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
			100					105					110		
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met

115 120 125  
 His Ser Gly Phe Lys Ile Leu Asn Cys Gln Lys Ala Met Glu Glu Arg  
 130 135 140  
 Gln Glu Ala Thr Val Leu Thr Ser His Thr Leu Pro Asp Ser Leu Val  
 145 150 155 160  
 Tyr Gly Ala Asp Trp Ser Trp Leu Leu Phe Arg Ser Leu Gln Arg Ala  
 165 170 175  
 Pro Ser Trp Ser Phe Pro Ser Asn Leu Gly Thr Lys Thr Ala Asp Leu  
 180 185 190  
 Lys Gly Ala Ser Glu Leu Pro Thr Pro Cys His Glu Cys Arg Glu Asp  
 195 200 205  
 Asn Asp Gly Glu Gly His Ala Arg Pro Gln Ser Gly Met Lys Pro Leu  
 210 215 220  
 Thr Glu Gly Met Arg Lys Asn Gly Thr Trp Leu Gln Ala Thr Ala Ala  
 225 230 235 240  
 Thr Thr Arg Asp Cys Gly Val Asn Pro Glu Glu Ala Asp Ser Ala Phe  
 245 250 255  
 Ser Leu Leu Ala Thr Cys Ser Phe Tyr Asp His Ala Leu His Leu Trp  
 260 265 270  
 Glu Trp Glu Gly Asn  
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<210> 3635  
 <211> 835  
 <212> DNA  
 <213> Homo sapiens

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 360  
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 660  
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 720  
 ttgctggaca atggtgcaga cattgaagcc cagtctgaaa gaaccaagga cacaccactc  
 780

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835

<210> 3636  
<211> 278  
<212> PRT  
<213> Homo sapiens

<400> 3636  
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20 25 30  
Ala Arg Leu Gln Gln Val Asp Pro Val Leu Leu Lys Asp Glu Pro Gln  
35 40 45  
Gln Thr Ala Ala Gln Met Gly Cys Ala Pro Ile Gln Pro Leu Ala Met  
50 55 60  
Pro Gln Ala Leu Pro Leu Ala Ala Gly Pro Leu Pro Pro Gly Ser Ile  
65 70 75 80  
Ala Asn Leu Thr Glu Leu Gln Gly Val Ile Val Gly Gln Pro Val Leu  
85 90 95  
Gly Gln Ala Gln Leu Ala Gly Leu Gly Gln Gly Ile Leu Thr Glu Thr  
100 105 110  
Gln Gln Gly Leu Met Val Ala Ser Pro Ala Gln Thr Leu Asn Asp Thr  
115 120 125  
Leu Asp Asp Ile Met Ala Ala Val Ser Gly Arg Ala Ser Ala Met Ser  
130 135 140  
Asn Thr Pro Thr His Ser Ile Ala Ala Ser Ile Ser Gln Pro Gln Thr  
145 150 155 160  
Pro Thr Pro Ser Pro Ile Ile Ser Pro Ser Ala Met Leu Pro Ile Tyr  
165 170 175  
Pro Ala Ile Asp Ile Asp Ala Gln Thr Glu Ser Asn His Asp Thr Ala  
180 185 190  
Leu Thr Leu Ala Cys Ala Gly Gly His Glu Glu Leu Val Gln Thr Leu  
195 200 205  
Leu Glu Arg Gly Ala Ser Ile Glu His Arg Asp Lys Lys Gly Phe Thr  
210 215 220  
Pro Leu Ile Leu Ala Ala Thr Ala Gly His Val Gly Val Val Glu Ile  
225 230 235 240  
Leu Leu Asp Asn Gly Ala Asp Ile Glu Ala Gln Ser Glu Arg Thr Lys  
245 250 255  
Asp Thr Pro Leu Ser Leu Ala Cys Ser Gly Gly Arg Gln Glu Val Val  
260 265 270  
Glu Leu Leu Leu Ala Arg  
275

<210> 3637  
<211> 2128  
<212> DNA  
<213> Homo sapiens

<400> 3637  
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120  
cctgccaaacc cctgctcttc caggtcgggc cccgggggttc tgcggctgtt agggacagag  
180  
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240  
gttggtgtgtg cgccccggac gcgggaggga aggtagccgc cgccccccag ccatggacca  
300  
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480  
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1140  
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1260  
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1320  
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1380  
acacacacac acacacacaa caaatctaca tatacaaaca agggtttggg ttttagtttt  
1440  
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1560  
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1620  
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1680

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 1740  
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 tgcagacctt tagagttaag cctttgtatt tccatgttat tccacaatat gcaatatttc  
 1860  
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 1920  
 aggagagaat tcagccgaag atatgagagt aatgagagac attttccagt cattggatcg  
 1980  
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 2128

<210> 3638  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 3638  
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 Phe Leu Cys Ala Ala Thr Ser Cys Val Gly Phe Phe Met Pro Tyr Trp  
 20 25 30  
 Leu Trp Gly Ser Gln Leu Gly Lys Pro Val Ser Phe Gly Thr Phe Arg  
 35 40 45  
 Arg Cys Ser Tyr Pro Val His Asp Glu Ser Arg Gln Met Met Val Met  
 50 55 60  
 Val Glu Glu Cys Gly Arg Tyr Ala Ser Phe Gln Gly Ile Pro Ser Ala  
 65 70 75 80  
 Glu Trp Arg Ile Cys Thr Ile Val Thr Gly Leu Gly Cys Gly Leu Leu  
 85 90 95  
 Leu Leu Val Ala Leu Thr Ala Leu Met Gly Cys Cys Val Ser Asp Leu  
 100 105 110  
 Ile Ser Arg Thr Val Gly Arg Val Ala Gly Gly Ile Gln Phe Leu Gly  
 115 120 125  
 Gly Leu Leu Ile Gly Ala Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asp  
 130 135 140  
 Ser Glu Glu Val Arg Gln Thr Cys Gly Tyr Thr Ser Gly Gln Phe Asp  
 145 150 155 160  
 Leu Gly Lys Cys Glu Ile Gly Trp Ala Tyr Tyr Cys Thr Gly Ala Gly  
 165 170 175  
 Ala Thr Ala Ala Met Leu Leu Cys Thr Trp Leu Ala Cys Phe Ser Gly  
 180 185 190  
 Lys Lys Gln Lys His Tyr Pro Tyr  
 195 200

<210> 3639  
 <211> 726  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 3639

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 120  
 aagactaaca gtgggttatct ctcagcggga ttataaatgt tttgggtttt tttttttttt  
 180  
 tgtacatttt agtatttttt gaaatttttt taataagcgt gtattacata cagtaaacia  
 240  
 aagcacatta atgtaggcag attatcaatg ttatgcattt cactgattgc atatctcttt  
 300  
 ttttatcaat ggtgaacatt gcaaagtatt gatacgtttt tcttaggaag tggcattgcc  
 360  
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 420  
 gcaataaaaa aatttcacct tttaatggat ttaaaaggga aaagtggggg tgttgggttc  
 480  
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 540  
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 600  
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 720  
 taagat  
 726

&lt;210&gt; 3640

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3640

Met	Leu	His	Ala	Ala	Arg	Lys	Arg	Asp	His	Val	Pro	Phe	Arg	Lys	Met
1				5					10					15	
Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25					30		
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
			35				40					45			
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
			50			55				60					
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
65					70				75					80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
			85					90						95	
Leu	Ile	Ile	Cys	Leu	His										
			100												

&lt;210&gt; 3641

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 3641  
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 120  
 agtccccgag cagtcacgcg agccgggacc ttgccccgct ggaacgcaga agcggccgtg  
 180  
 gagctcgaga cgctcgcgcg ctcacctcct gggcccctgt gcgtggggaa gtcaggaaga  
 240  
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 300  
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 360  
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 455

<210> 3642  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 3642  
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 20 25 30  
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 35 40 45  
 Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu  
 50 55 60  
 Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser  
 65 70 75 80  
 Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala  
 85 90 95  
 Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro  
 100 105 110  
 Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser  
 115 120 125  
 Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala  
 130 135 140  
 Phe Lys Thr Arg  
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<210> 3643  
 <211> 2243  
 <212> DNA  
 <213> Homo sapiens

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ctttgcaagc aggtggccag taaagctgag gagaatctgc tcatggtgct ggggacagac  
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300  
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360  
gacaagttca tcaagcaaag ggactaccac cagcagttcc ggcatgttca gaacaacctg  
420  
atgagaaatt ctacaacaga aaaaatcgaa ccaagagaac tggaccccat cctgactgag  
480  
gtcaccctga tgaatgcccg cagtgcagta tacttacgct tcctcaagaa gaggattagc  
540  
tctgattttg aggtgggaga ctccatggcc tcagaggaag taaagcaaga gcaccagaag  
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660  
ttatatgtta ccatggagga gtacttcatg agggagactg tcaataaggc tgtggctctg  
720  
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780  
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1140  
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1680

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 1920  
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 1980  
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 2040  
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 2100  
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 2243

<210> 3644

<211> 560

<212> PRT

<213> Homo sapiens

<400> 3644

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Gln	Val	Ala	Ser	Lys	Ala	Glu	Glu	Asn	Leu	Leu	Met	Val	Leu	Gly	Thr
			20					25					30		
Asp	Met	Ser	Asp	Arg	Arg	Ala	Ala	Val	Ile	Phe	Ala	Asp	Thr	Leu	Thr
		35					40				45				
Leu	Leu	Phe	Glu	Gly	Ile	Ala	Arg	Ile	Val	Glu	Thr	His	Gln	Pro	Ile
	50					55				60					
Val	Glu	Thr	Tyr	Tyr	Gly	Pro	Gly	Arg	Leu	Tyr	Thr	Leu	Ile	Lys	Tyr
65					70					75				80	
Leu	Gln	Val	Glu	Cys	Asp	Arg	Gln	Val	Glu	Lys	Val	Val	Asp	Lys	Phe
			85						90					95	
Ile	Lys	Gln	Arg	Asp	Tyr	His	Gln	Gln	Phe	Arg	His	Val	Gln	Asn	Asn
			100						105				110		
Leu	Met	Arg	Asn	Ser	Thr	Thr	Glu	Lys	Ile	Glu	Pro	Arg	Glu	Leu	Asp
			115					120					125		
Pro	Ile	Leu	Thr	Glu	Val	Thr	Leu	Met	Asn	Ala	Arg	Ser	Glu	Leu	Tyr
			130				135					140			
Leu	Arg	Phe	Leu	Lys	Lys	Arg	Ile	Ser	Ser	Asp	Phe	Glu	Val	Gly	Asp
145					150					155					160
Ser	Met	Ala	Ser	Glu	Glu	Val	Lys	Gln	Glu	His	Gln	Lys	Cys	Leu	Asp
			165						170					175	
Lys	Leu	Leu	Asn	Cys	Leu	Leu	Ser	Cys	Thr	Met	Gln	Glu	Leu	Ile	
			180					185					190		
Gly	Leu	Tyr	Val	Thr	Met	Glu	Glu	Tyr	Phe	Met	Arg	Glu	Thr	Val	Asn
			195					200					205		
Lys	Ala	Val	Ala	Leu	Asp	Thr	Tyr	Glu	Lys	Gly	Gln	Leu	Thr	Ser	Ser

210	215	220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala		
225	230	235
Leu Ser Ser Ser Ser Ile Asp Cys Leu Cys Ala Met Ile Asn Leu Ala		240
	245	250
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu		255
	260	265
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val		270
	275	280
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe		285
	290	295
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu		300
305	310	315
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu		320
	325	330
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile		335
	340	345
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu		350
	355	360
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr		365
	370	375
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn		380
385	390	395
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Phe Asn Asp		400
	405	410
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu		415
	420	425
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp		430
	435	440
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys		445
	450	455
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp		460
465	470	475
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp		480
	485	490
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu		495
	500	505
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser		510
	515	520
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu		525
	530	535
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu		540
545	550	555
		560

&lt;210&gt; 3645

&lt;211&gt; 823

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3645

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120

tcgggttgat ttcctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt  
 180  
 cctcctcctt ggaggctaag atttggcgta actctttcct gagatcaata aaacgatcgt  
 240  
 ggaacagggc caggcaccac ggctcgtga agtagctata gagatctgtg atcaggtttt  
 300  
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 360  
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 420  
 tgtaatatg aattcggaag taagtcccat ttttcgcact gccggttact agttctaaac  
 480  
 cataattagg ctgggccatt tgtacctcca agggagttgg aatggcaggc ttggcaatat  
 540  
 gcagataatg gtaagaccca ggaagaatgc ccccttgaat cttggctccc ttgtacatgg  
 600  
 ggatgagccg gtcaagatta gctggtggct cggtcacagg ctcaaggggt ggatcaaaga  
 660  
 gatgtagcat agctgctgcc agctgaaagc caatttcttt ggaactgaag ttgctggtgg  
 720  
 gccattcat ttgagtagta tctattggag aatttggtga gggagccagc agctctgatg  
 780  
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 823

<210> 3646

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3646

Met	Asn	Gly	Pro	Thr	Ser	Asn	Phe	Ser	Ser	Lys	Glu	Ile	Gly	Phe	Gln
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Leu	Ala	Ala	Ala	Met	Leu	His	Leu	Phe	Asp	Pro	Thr	Leu	Glu	Pro	Val
			20					25					30		
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
		35					40					45			
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55					60				
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70					75				80	
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
			85						90					95	
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
			100					105						110	
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
		115					120					125			
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
	130						135				140				
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145					150					155				160	
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
			165						170					175	
Ile	Leu	Ala	Ser	Lys	Glu	Glu	Glu	Asp	Leu	Pro	Ser	Ile	Glu	Gln	Leu

[illegible]

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<210> 3647
<211> 584
<212> DNA
<213> Homo sapiens
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120
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420
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480
atgtcatcgt ccccgagagc cgagccact tcttcagca gctgggctac gtgctggcca
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584

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<210> 3648
<211> 63
<212> PRT
<213> Homo sapiens
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<400> 3648
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          20          25          30
Val Ser Ser Arg Trp Arg Ser Pro Thr Arg Ala Pro Thr Pro Ala Thr
          35          40          45
Cys Thr Thr Ile Thr Val Ala Cys Thr Asn Ala Ala Ser Ser Thr
          50          55          60

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<210> 3649  
<211> 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3649

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120
tgctcattgt ttgctgtgct cccctttttt tttcaggttg ctatttctgc agatgtcaaa
180
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240
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300
gataatgaga cagatgtctc tcaactggaa ggacattttg acattgttat gtgtgctgac
360
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420
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480
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540
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648

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&lt;210&gt; 3650

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3650

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Met Ile Leu Lys Ala Cys His Ser Cys Phe His Phe His Thr Asp Lys
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His Ile Cys Ser Leu Phe Ala Val Leu Pro Phe Phe Phe Gln Val Ala
             20             25             30
Ile Ser Ala Asp Val Lys Glu Val Leu Leu Thr Asp Gly Asn Glu Lys
             35             40             45
Ala Ile Arg Asn Val Gln Asp Ile Ile Thr Arg Asn Gln Lys Ala Gly
             50             55             60
Val Phe Lys Thr Gln Lys Ile Ser Ser Cys Val Leu Arg Trp Asp Asn
65             70             75             80
Glu Thr Asp Val Ser Gln Leu Glu Gly His Phe Asp Ile Val Met Cys
             85             90             95
Ala Asp Cys Leu Phe Leu Asp Gln Tyr Arg Ala Ser Leu Val Asp Ala
             100            105            110
Ile Lys Arg Leu Leu Gln Pro Arg Gly Lys Ala Met Val Phe Ala Pro
             115            120            125
Arg Arg Gly Asn Thr Leu Asn Gln Phe Cys Asn Leu Ala Glu Lys Ala
             130            135            140
Gly Phe Cys Ile Gln Arg His Glu Asn Tyr Asp Glu His Ile Ser Asn
145            150            155            160
Phe His Ser Lys Leu Lys Lys Glu Asn Pro Asp Ile Tyr Glu Glu Asn

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cagggcagca atctctccag gtccctgcaa gatggagcca gaattccctt tttcactgat  
 1380  
 aaatatatattt cttcattgcc aaagaggctg taccatcctt gaaggcacat ttgtgggttc  
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<212> PRT

<213> Homo sapiens

<400> 3652

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Lys	Met	Ile	Pro	Pro	Gly	Ile	His	Phe	Leu	His	Tyr	Ser	Ser	Val	Asp

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Glu	Val	Asp	Leu	Ser	Pro	Ala	Pro	Glu	Ser	Glu	Val	Glu	Ala	Met	Arg
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Ser	Glu	Leu	Pro	Thr	Gln	Met	Phe	Pro	Glu	Gly	Ala	Thr	Pro	Ala	Glu
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Ile	Thr	Lys	His	Ser	Met	Asp	Leu	Ser	Tyr	Ala	Leu	Glu	Thr	Val	Leu
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His	Trp	Lys	Arg	Leu	Leu	His	Leu	Leu	Cys	Arg	Ser	Glu	Ala	Ala	Met
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Met	Lys	His	His	Thr	Leu	Tyr	Ile	Asn	Leu	Met	Ser	Ile	Leu	Tyr	His
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Gln	Leu	Gly	Glu	Ile	Pro	Ala	Asp	Phe	Phe	Val	Asp	Ile	Val	Ser	Gln
305				310						315					320
Asp	Asn	Phe	Leu	Thr	Ser	Thr	Leu	Gln	Val	Phe	Phe	Ser	Ser	Ala	Cys
				325						330					335
Ser	Ile	Ala	Val	Asp	Ala	Thr	Leu	Arg	Lys	Lys	Ala	Glu	Lys	Phe	Gln
				340				345							350
Ala	His	Leu	Thr	Lys	Lys	Phe	Arg	Trp	Asp	Phe	Ala	Ala	Glu	Pro	Glu
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<212> DNA
<213> Homo sapiens
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180
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<210> 3654  
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 35 40 45  
 Ser Ser Glu Leu Arg Leu His Ile Phe Ala Asp Trp Glu Glu Gly Arg  
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<210> 3655  
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 300  
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 420  
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<211> 429

<212> PRT

<213> Homo sapiens

<400> 3656

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Cys	Met	Ala	Ser	Leu	Phe	Pro	Ala	Trp	Glu	Pro	Pro	Leu	Ile	Thr	Leu
			20					25				30			
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
		35					40				45				
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
	50					55					60				
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

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Glu Gln Glu Lys Ile Asp Lys Leu Met Ile Glu Met Asp Gly Thr Glu
      85          90          95
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      100          105          110
Val Cys Lys Ala Gly Ala Val Glu Lys Gly Val Pro Leu Tyr Arg His
      115          120          125
Ile Ala Asp Leu Ala Gly Asn Ser Glu Val Ile Leu Pro Val Pro Ala
      130          135          140
Phe Asn Val Ile Asn Gly Gly Ser His Ala Gly Asn Lys Leu Ala Met
145          150          155          160
Gln Glu Phe Met Ile Leu Pro Val Gly Ala Ala Asn Phe Arg Glu Ala
      165          170          175
Met Arg Ile Gly Ala Glu Val Tyr His Asn Leu Lys Asn Val Ile Lys
      180          185          190
Glu Lys Tyr Gly Lys Asp Ala Thr Asn Val Gly Asp Glu Gly Gly Phe
      195          200          205
Ala Pro Asn Ile Leu Glu Asn Lys Glu Gly Leu Glu Leu Leu Lys Thr
      210          215          220
Ala Ile Gly Lys Ala Gly Tyr Thr Asp Lys Val Val Ile Gly Met Asp
225          230          235          240
Val Ala Ala Ser Glu Phe Phe Arg Ser Gly Lys Tyr Asp Leu Asp Phe
      245          250          255
Lys Ser Pro Asp Asp Pro Ser Arg Tyr Ile Ser Pro Asp Gln Leu Ala
      260          265          270
Asp Leu Tyr Lys Ser Phe Ile Lys Asp Tyr Pro Val Val Ser Ile Glu
      275          280          285
Asp Pro Phe Asp Gln Asp Asp Trp Gly Ala Trp Gln Lys Phe Thr Ala
      290          295          300
Ser Ala Gly Ile Gln Val Val Gly Asp Asp Leu Thr Val Thr Asn Pro
305          310          315          320
Lys Arg Ile Ala Gln Ala Val Asn Glu Lys Ser Cys Asn Cys Leu Leu
      325          330          335
Leu Lys Val Asn Gln Ile Gly Ser Val Thr Glu Ser Leu Gln Ala Cys
      340          345          350
Lys Leu Ala Gln Ala Asn Gly Trp Gly Val Met Val Ser His Arg Ser
      355          360          365
Gly Glu Thr Glu Asp Thr Phe Ile Ala Asp Leu Val Val Gly Leu Cys
      370          375          380
Thr Gly Gln Ile Lys Thr Gly Ala Pro Cys Arg Ser Glu Arg Leu Ala
385          390          395          400
Lys Tyr Asn Gln Leu Leu Arg Ile Glu Glu Glu Leu Gly Ser Lys Ala
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Lys Phe Ala Gly Arg Asn Phe Arg Asn Pro Leu Ala Lys
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&lt;210&gt; 3657

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3657

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<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
			20					25					30		
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
		35				40						45			
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
	50					55					60				
Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
65					70					75				80	
Gln	Arg	Val	His	Val	Gln	Val	Cys	His	Met	Phe	Ile	Phe	Gly	Ser	Arg
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Arg Thr Arg

<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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 1025

&lt;210&gt; 3660

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3660

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			20					25					30		
Glu	Ile	Ser	Asp	Leu	Glu	Asn	Glu	Val	Glu	Asn	Lys	Thr	Ala	Gln	Ile
	35						40					45			
Leu	Asn	Leu	Gln	Gln	His	Leu	Ser	Ala	Leu	Glu	Lys	Asp	Ile	Lys	His
	50					55					60				
Asn	Glu	Glu	Leu	Leu	Lys	Arg	Cys	Gln	Leu	His	Tyr	Lys	Glu	Leu	Lys
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Met	Lys	Ile	Arg	Lys	Asn	Ile	Ser	Glu	Ile	Arg	Glu	Leu	Glu	Asn	Ile
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Glu	Glu	His	Gln	Ser	Val	Asp	Ile	Ala	Thr	Leu	Glu	Asp	Glu	Ala	Gln
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	115						120					125			
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Ile Met Arg Gln Tyr Gln Glu Ala Arg Glu Thr Tyr Leu Asp Leu Asp
      260              265              270
Ser Lys Val Arg Thr Leu Lys Lys Phe Ile Lys Leu Leu Gly Glu Ile
      275              280              285
Met Glu His Arg Phe Lys Thr Tyr Gln Gln Phe Arg Arg Cys Leu Thr
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Leu Arg Cys Lys Leu Tyr Phe Asp Asn Leu Leu Ser Gln Arg Ala Tyr
305              310              315              320
Cys Gly Lys Met Asn Phe Asp His Lys Asn Glu Thr Leu Ser Ile Ser
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Val Gln Pro Gly Glu
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&lt;210&gt; 3661

&lt;211&gt; 1117

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3661

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<211> 371

<212> PRT

<213> Homo sapiens

<400> 3662

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          20          25          30
Met Ser Asp Asn Val Asp Arg Cys Phe Glu Thr Cys Pro Pro Arg Thr
          35          40          45
Phe Leu Pro Ala Leu Tyr Lys Ile Phe Leu Asp Glu Ser Ala Pro Asp
          50          55          60
Asn Val Leu Glu Val Thr Ala Arg Ala Ile Thr Tyr Tyr Leu Asp Val
65          70          75          80
Ser Ala Glu Cys Thr Arg Arg Ile Val Gly Val Asp Gly Ala Ile Lys
          85          90          95
Ala Leu Cys Asn Arg Leu Val Val Val Glu Leu Asn Asn Arg Thr Ser

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&lt;211&gt; 6633

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3665

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&lt;211&gt; 1728

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3666

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Phe Thr Phe Thr Thr Glu Ser Cys Phe Ser Asp Arg Gly Ser Leu Lys																				
	405										410					415				
Ser Ile Met Gln Ser Asn Thr Leu Thr Lys Asp Glu Asp Val Gln Arg																				
	420										425					430				
Asp Leu Glu His Ser Leu Gln Met Glu Ala Tyr Glu Arg Arg Ile Arg																				
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Arg Leu Glu Gln Glu Lys Leu Glu Leu Ser Arg Lys Leu Gln Glu Ser																				
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Ser Asn Arg Asp Lys Glu Ile Lys Lys Leu Asn Glu Glu Ile Glu Arg																				
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Asp Thr Val Ala Leu Arg Gln Glu Arg Glu Asp Ser Thr Gln Arg Leu																				
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Arg Gly Leu Glu Lys Gln His Arg Val Val Arg Gln Glu Lys Glu Glu																				
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Lys Glu Leu Lys Asp Ala His Gln Gln Arg Lys Leu Ala Leu Gln Glu																				
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Leu Arg Lys Glu Leu Glu Ala Gln Leu Asp Asp Ala Val Ala Glu Ala																				
625	630										635					640				
Ser Lys Glu Arg Lys Leu Arg Glu His Ser Glu Asn Phe Cys Lys Gln																				
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Met Glu Ser Glu Leu Glu Ala Leu Lys Val Lys Gln Gly Gly Arg Gly																				

660													665				670					
Ala	Gly	Ala	Thr	Leu	Glu	His	Gln	Gln	Glu	Ile	Ser	Lys	Ile	Lys	Ser							
675													680				685					
Glu	Leu	Glu	Lys	Lys	Val	Leu	Phe	Tyr	Glu	Glu	Glu	Leu	Val	Arg	Arg							
690													695				700					
Glu	Ala	Ser	His	Val	Leu	Glu	Val	Lys	Asn	Val	Lys	Lys	Glu	Val	His							
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Asp	Ser	Glu	Ser	His	Gln	Leu	Ala	Leu	Gln	Lys	Glu	Ile	Leu	Met	Leu							
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Lys	Asp	Lys	Leu	Glu	Lys	Ser	Lys	Arg	Glu	Arg	His	Asn	Glu	Met	Glu							
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Glu	Ala	Val	Gly	Thr	Ile	Lys	Asp	Lys	Tyr	Glu	Arg	Glu	Arg	Ala	Met							
750													755				760					
Leu	Phe	Asp	Glu	Asn	Lys	Lys	Leu	Thr	Ala	Glu	Asn	Glu	Lys	Leu	Cys							
765													770				775					
Ser	Phe	Val	Asp	Lys	Leu	Thr	Ala	Gln	Asn	Arg	Gln	Leu	Glu	Asp	Glu							
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Leu	Gln	Asp	Leu	Ala	Ala	Lys	Lys	Glu	Ser	Val	Ala	His	Trp	Glu	Ala							
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Gln	Ile	Ala	Glu	Ile	Ile	Gln	Trp	Val	Ser	Asp	Glu	Lys	Asp	Ala	Arg							
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Gly	Tyr	Leu	Gln	Ala	Leu	Ala	Ser	Lys	Met	Thr	Glu	Glu	Leu	Glu	Ala							
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Leu	Arg	Ser	Ser	Ser	Leu	Gly	Ser	Arg	Thr	Leu	Asp	Pro	Leu	Trp	Lys							
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Val	Arg	Arg	Ser	Gln	Lys	Leu	Asp	Met	Ser	Ala	Arg	Leu	Glu	Leu	Gln							
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Ser	Ala	Leu	Glu	Ala	Glu	Ile	Arg	Ala	Lys	Gln	Leu	Val	Gln	Glu	Glu							
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Leu	Arg	Lys	Val	Lys	Asp	Ala	Asn	Leu	Thr	Leu	Glu	Ser	Lys	Leu	Lys							
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Asp	Ser	Glu	Ala	Lys	Asn	Arg	Glu	Leu	Leu	Glu	Glu	Met	Glu	Ile	Leu							
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920													925				930					
Pro	Asp	Phe	Gln	Asp	Ser	Ile	Phe	Glu	Tyr	Phe	Asn	Thr	Ala	Pro	Leu							
935													940				945					
Ala	His	Asp	Leu	Thr	Phe	Arg	Asp	Ser	Leu	Ser	Ser	Ser	Ser	Ala	Ser							
950													955				960					
Ser	Leu	Leu	Ala	Phe	Trp	Glu	Glu	Thr	Ser	Ser	Ala	Ser	Glu	Gln	Glu							
965													970				975					
Thr	Gln	Ala	Pro	Lys	Pro	Glu	Ala	Ser	Pro	Ser	Met	Ser	Val	Ala	Ala							
980													985				990					
Ser	Glu	Gln	Gln	Glu	Asp	Met	Ala	Arg	Pro	Pro	Gln	Arg	Pro	Ser	Ala							
995													1000				1005					
Val	Pro	Leu	Pro	Thr	Thr																	

1090	1095	1100
Val Asp Val Gln Arg Gly Ile Gly Thr Ala Tyr Lys Gly His Val Lys		
1105	1110	1115
Val Pro Lys Pro Thr Gly Val Lys Lys Gly Trp Gln Arg Ala Tyr Ala		1120
	1125	1130
Val Val Cys Asp Cys Lys Leu Phe Leu Tyr Asp Leu Pro Glu Gly Lys		1135
	1140	1145
Ser Thr Gln Pro Gly Val Ile Ala Ser Gln Val Leu Asp Leu Arg Asp		1150
	1155	1160
Asp Glu Phe Ser Val Ser Ser Val Leu Ala Ser Asp Val Ile His Ala		1165
	1170	1175
Thr Arg Arg Asp Ile Pro Cys Ile Phe Arg Val Thr Ala Ser Leu Leu		1180
1185	1190	1195
Gly Ala Pro Ser Lys Thr Ser Ser Leu Leu Ile Leu Thr Glu Asn Glu		1200
	1205	1210
Asn Glu Lys Arg Lys Trp Val Gly Ile Leu Glu Gly Leu Gln Ser Ile		1215
	1220	1225
Leu His Lys Asn Arg Leu Arg Asn Gln Val Val His Val Pro Leu Glu		1230
	1235	1240
Ala Tyr Asp Ser Ser Leu Pro Leu Ile Lys Ala Ile Leu Thr Ala Ala		1245
	1250	1255
Ile Val Asp Ala Asp Arg Ile Ala Val Gly Leu Glu Glu Gly Leu Tyr		1260
1265	1270	1275
Val Ile Glu Val Thr Arg Asp Val Ile Val Arg Ala Ala Asp Cys Lys		1280
	1285	1290
Lys Val His Gln Ile Glu Leu Ala Pro Arg Glu Lys Ile Val Ile Leu		1295
	1300	1305
Leu Cys Gly Arg Asn His His Val His Leu Tyr Pro Trp Ser Ser Leu		1310
	1315	1320
Asp Gly Ala Glu Gly Ser Phe Asp Ile Lys Leu Pro Glu Thr Lys Gly		1325
	1330	1335
Cys Gln Leu Met Ala Thr Ala Thr Leu Lys Arg Asn Ser Gly Thr Cys		1340
1345	1350	1355
Leu Phe Val Ala Val Lys Arg Leu Ile Leu Cys Tyr Glu Ile Gln Arg		1360
	1365	1370
Thr Lys Pro Phe His Arg Lys Phe Asn Glu Ile Val Ala Pro Gly Ser		1375
	1380	1385
Val Gln Cys Leu Ala Val Leu Arg Asp Arg Leu Cys Val Gly Tyr Pro		1390
	1395	1400
Ser Gly Phe Cys Leu Leu Ser Ile Gln Gly Asp Gly Gln Pro Leu Asn		1405
	1410	1415
Leu Val Asn Pro Asn Asp Pro Ser Leu Ala Phe Leu Ser Gln Gln Ser		1420
1425	1430	1435
Phe Asp Ala Leu Cys Ala Val Glu Leu Glu Ser Glu Glu Tyr Leu Leu		1440
	1445	1450
Cys Phe Ser His Met Gly Leu Tyr Val Asp Pro Gln Gly Arg Arg Ala		1455
	1460	1465
Arg Ala Gln Glu Leu Met Trp Pro Ala Ala Pro Val Ala Cys Ser Cys		1470
	1475	1480
Ser Pro Thr His Val Thr Val Tyr Ser Glu Tyr Gly Val Asp Val Phe		1485
	1490	1495
Asp Val Arg Thr Met Glu Trp Val Gln Thr Ile Gly Leu Arg Arg Ile		1500
1505	1510	1515
Arg Pro Leu Asn Ser Glu Gly Thr Leu Asn Leu Leu Asn Cys Glu Pro		1520

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 1540 1545 1550  
 Val Pro Asp Thr Ser Asp Asn Ser Lys Lys Gln Met Leu Arg Thr Arg  
 1555 1560 1565  
 Ser Lys Arg Arg Phe Val Phe Lys Val Pro Glu Glu Glu Arg Leu Gln  
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 Gln Arg Arg Glu Met Leu Arg Asp Pro Glu Leu Arg Ser Lys Met Ile  
 1585 1590 1595 1600  
 Ser Asn Pro Thr Asn Phe Asn His Val Ala His Met Gly Pro Gly Asp  
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 Gly Met Gln Val Leu Met Asp Leu Pro Leu Ser Ala Val Pro Pro Ser  
 1620 1625 1630  
 Gln Glu Glu Arg Pro Gly Pro Ala Pro Thr Asn Leu Ala Arg Gln Pro  
 1635 1640 1645  
 Pro Ser Arg Asn Lys Pro Tyr Ile Ser Trp Pro Ser Ser Gly Gly Ser  
 1650 1655 1660  
 Glu Pro Ser Val Thr Val Pro Leu Arg Ser Met Ser Asp Pro Asp Gln  
 1665 1670 1675 1680  
 Asp Phe Asp Lys Glu Pro Asp Ser Asp Ser Thr Lys His Ser Thr Pro  
 1685 1690 1695  
 Ser Asn Ser Ser Asn Pro Ser Gly Pro Pro Ser Pro Asn Ser Pro His  
 1700 1705 1710  
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 1715 1720 1725

&lt;210&gt; 3667

&lt;211&gt; 505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3667

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 120  
 tgattgtatt tactctttct tccctactca tagtatgcgt tccattttga ggaatcacag  
 180  
 atatcgaaga gatgccagaa cactagaaga tgaagaagag atgtggttta acacagatga  
 240  
 agatgacatg gaagatggag aagctgtagt gtctccatct gacaaaacta aaaatgatga  
 300  
 tgatattatg gatccaataa gtaaattcat ggaaaggaag aaattaaaag aaagtgagga  
 360  
 aaaggaagtg cttctgaaaa caaacctttc tggacggcag agcccaagtt tcaagctttc  
 420  
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&lt;210&gt; 3668

&lt;211&gt; 117

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3668

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Glu Asp Gly Glu Ala Val Val Ser Pro Ser Asp Lys Thr Lys Asn Asp
           35           40           45
Asp Asp Ile Met Asp Pro Ile Ser Lys Phe Met Glu Arg Lys Lys Leu
           50           55           60
Lys Glu Ser Glu Glu Lys Glu Val Leu Leu Lys Thr Asn Leu Ser Gly
65           70           75           80
Arg Gln Ser Pro Ser Phe Lys Leu Ser Leu Ser Ser Gly Thr Lys Thr
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Asn Leu Thr Ser Gln Ser Ser Thr Thr Asn Leu Pro Gly Ser Pro Gly
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Ser Pro Gly Ser Pro
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<210> 3669

<211> 1226

<212> DNA

<213> Homo sapiens

<400> 3669

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120
ggattaatct ttacattaa tcattcactt tatgaaaacc tggatgaaga attaaatgaa
180
gaattagcag caaaagtggg tcagatgttt tatgtggctg agccaaagca agtgcccat
240
attctctgta gtccttctat gaagaatatt aatcctttaa ctgccatgag ctatctaagg
300
aagatggata cttctgggtt ttcattccatc ttagtgacac tgagcaaggc agcagtggca
360
ctgaaaatgg gagatcttga cgtgtacaga aatgaaatga aaagccatcc agagatgaag
420
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gtcctgggat tgcagaagaa cagcaaaatt gggattgaag aagcagattc tttctttaag
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cagctagtgg catgtctccc agatgtggta cttcaggaac tctttttcaa actcacatca
720
cagtacatct ggagattgtc taagaggcag cctcctgaca ccacaccatt gcgaacatcg
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840

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atatcatctg attctttagc tgataaaaat tatacagaag atctttcaaa attacagtct  
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 960  
 gaagacacta ttgccggcct cagtgtccat gttctgtgtc gtacacgctt gaaagagtat  
 1020  
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 1080  
 catgaactga aagaagagaa ccggactctg tgggtggaaaa aactgttgcc tgaactttgt  
 1140  
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<210> 3670

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3670

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			20					25					30		
Asn	His	Ser	Leu	Tyr	Glu	Asn	Leu	Asp	Glu	Glu	Leu	Asn	Glu	Glu	Leu
		35				40					45				
Ala	Ala	Lys	Val	Val	Gln	Met	Phe	Tyr	Val	Ala	Glu	Pro	Lys	Gln	Val
	50					55					60				
Pro	His	Ile	Leu	Cys	Ser	Pro	Ser	Met	Lys	Asn	Ile	Asn	Pro	Leu	Thr
65				70						75				80	
Ala	Met	Ser	Tyr	Leu	Arg	Lys	Met	Asp	Thr	Ser	Gly	Phe	Ser	Ser	Ile
			85						90					95	
Leu	Val	Thr	Leu	Ser	Lys	Ala	Ala	Val	Ala	Leu	Lys	Met	Gly	Asp	Leu
			100					105					110		
Asp	Val	Tyr	Arg	Asn	Glu	Met	Lys	Ser	His	Pro	Glu	Met	Lys	Leu	Val
		115				120					125				
Cys	Gly	Phe	Ile	Leu	Glu	Pro	Arg	Leu	Leu	Ile	Gln	His	Arg	Lys	Gly
	130					135					140				
Gln	Ile	Val	Pro	Thr	Glu	Leu	Ala	Thr	His	Leu	Lys	Glu	Thr	Gln	Pro
145					150					155				160	
Gly	Leu	Leu	Val	Ala	Ser	Val	Leu	Gly	Leu	Gln	Lys	Asn	Ser	Lys	Ile
			165						170					175	
Gly	Ile	Glu	Glu	Ala	Asp	Ser	Phe	Phe	Lys	Val	Leu	Cys	Gly	Lys	Asp
			180					185					190		
Glu	Asp	Thr	Ile	Pro	Gln	Leu	Leu	Ile	Asp	Phe	Trp	Glu	Ala	Gln	Leu
		195				200					205				
Val	Ala	Cys	Leu	Pro	Asp	Val	Val	Leu	Gln	Glu	Leu	Phe	Phe	Lys	Leu
	210					215					220				
Thr	Ser	Gln	Tyr	Ile	Trp	Arg	Leu	Ser	Lys	Arg	Gln	Pro	Pro	Asp	Thr
225					230					235				240	
Thr	Pro	Leu	Arg	Thr	Ser	Glu	Asp	Leu	Ile	Asn	Ala	Cys	Ser	His	Tyr
			245						250					255	
Gly	Leu	Ile	Tyr	Pro	Trp	Val	His	Val	Val	Ile	Ser	Ser	Asp	Ser	Leu

260 265 270  
 Ala Asp Lys Asn Tyr Thr Glu Asp Leu Ser Lys Leu Gln Ser Leu Ile  
 275 280 285  
 Cys Gly Pro Ser Phe Asp Ile Ala Ser Ile Ile Pro Phe Leu Glu Pro  
 290 295 300  
 Leu Ser Glu Asp Thr Ile Ala Gly Leu Ser Val His Val Leu Cys Arg  
 305 310 315 320  
 Thr Arg Leu Lys Glu Tyr Glu Gln Cys Ile Asp Ile Leu Leu Glu Arg  
 325 330 335  
 Cys Pro Glu Ala Val Ile Pro Tyr Ala Asn His Glu Leu Lys Glu Glu  
 340 345 350  
 Asn Arg Thr Leu Trp Trp Lys Lys Leu Leu Pro Glu Leu Cys Gln Arg  
 355 360 365  
 Ile Lys Cys Gly Gly Glu Lys Tyr Gln Leu Tyr Leu Ser Ser Leu Lys  
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 Ala  
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&lt;210&gt; 3671

&lt;211&gt; 828

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3671

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 360  
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 420  
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 480  
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 540  
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 600  
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 720  
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 828

&lt;210&gt; 3672



<211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 3672  
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 Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly  
 35 40 45  
 Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly  
 50 55 60  
 Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu  
 65 70 75 80  
 Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys  
 85 90 95  
 Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala  
 100 105 110  
 Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val  
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<210> 3673  
 <211> 1052  
 <212> DNA  
 <213> Homo sapiens

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 180  
 aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgtttt cgcaagttcc  
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 300  
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 420  
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 780

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 960  
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<210> 3674

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3674

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			20					25					30		
Ala	Cys	Ile	Lys	Ser	Phe	Ser	Asp	Glu	Gln	Trp	Tyr	Ser	Phe	Asn	Asp
		35					40					45			
Gln	His	Val	Ser	Arg	Ile	Thr	Gln	Glu	Asp	Ile	Lys	Lys	Thr	His	Gly
		50				55					60				
Gly	Ser	Ser	Gly	Ser	Arg	Gly	Tyr	Tyr	Ser	Ser	Ala	Phe	Ala	Ser	Ser
65					70					75				80	
Thr	Asn	Ala	Tyr	Met	Leu	Ile	Tyr	Arg	Leu	Lys	Asp	Pro	Ala	Arg	Asn
				85					90					95	
Ala	Lys	Phe	Leu	Glu	Val	Asp	Glu	Tyr	Pro	Glu	His	Ile	Lys	Asn	Leu
			100					105					110		
Val	Gln	Lys	Glu	Arg	Glu	Leu	Glu	Glu	Gln	Glu	Lys	Arg	Gln	Arg	Glu
		115				120						125			
Ile	Glu	Arg	Asn	Thr	Cys	Lys	Ile	Lys	Leu	Phe	Cys	Leu	His	Pro	Thr
		130				135					140				
Lys	Gln	Val	Met	Met	Glu	Asn	Lys	Leu	Glu	Val	His	Lys	Asp	Lys	Thr
145				150						155				160	
Leu	Lys	Glu	Ala	Val	Glu	Met	Ala	Tyr	Lys	Met	Met	Asp	Leu	Glu	Glu
			165					170					175		
Val	Ile	Pro	Leu	Asp	Cys	Cys	Arg	Leu	Val	Lys	Tyr	Asp	Glu	Phe	His
			180					185					190		
Asp	Tyr	Leu	Glu	Arg	Ser	Tyr	Glu	Gly	Glu	Glu	Asp	Thr	Pro	Met	Gly
		195				200						205			
Leu	Leu	Leu	Gly	Gly	Val	Lys	Ser	Thr	Tyr	Met	Phe	Asp	Leu	Leu	Leu
		210				215						220			
Glu	Thr	Arg	Lys	Pro	Asp	Gln	Val	Phe	Gln	Ser	Tyr	Lys	Pro	Gly	Gly
225				230						235				240	
Glu	Pro	Phe	Tyr	Thr	Ile	Phe	Ser	Trp	Ser	Val	Leu	Arg	Ile	Phe	Leu
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Arg	Lys	Val	Phe	Phe	Leu	Leu									
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<210> 3675

<211> 837

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3675

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180
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837

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&lt;210&gt; 3676

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3676

```

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1      5      10      15
Lys Ala Val Val Met Thr Arg Asp Asp Ser Ser Gly Gly Trp Phe Pro
20      25      30
Gln Glu Gly Gly Gly Ile Ser Arg Val Gly Val Cys Lys Val Met His
35      40      45
Pro Glu Gly Asn Gly Arg Ser Gly Phe Leu Ile His Gly Glu Arg Gln
50      55      60
Lys Asp Lys Leu Val Val Leu Glu Cys Tyr Val Arg Lys Asp Leu Val
65      70      75      80
Tyr Thr Lys Ala Asn Pro Thr Phe His His Trp Lys Val Asp Asn Arg
85      90      95
Lys Phe Gly Leu Thr Phe Gln Ser Pro Ala Asp Ala Arg Ala Phe Asp
100     105     110
Arg Gly Val Arg Lys Ala Ile Glu Asp Leu Ile Glu Glu Val Glu Asn

```

```

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Asp Ser Gly Gly Pro Arg Arg Leu Leu Ala Tyr Pro Leu Ser Ser Cys
      130              135              140
Asn Gln Arg Pro Arg Val Tyr Ser Cys His
      145              150

```

<210> 3677  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

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<400> 3677
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240
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300
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418

```

<210> 3678  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

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<400> 3678
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Leu Pro Pro Asp Phe Met Pro Lys Leu Val Lys Asn Leu Leu Gly Glu
20      25      30
Met Pro Leu Trp Val Cys Gln Ser Cys Arg Lys Ser Met Glu Glu Asp
35      40      45
Glu Arg Gln Thr Gly Arg Glu His Ala Val Ala Ile Ser Leu Ser His
50      55      60
Thr Ser Cys Lys Ser Gln Ser Cys Gly Asp Asp Ser His Ser Ser Ser
65      70      75      80
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Cys Pro Gly
85      90      95
Asn Ser Gly Asp Trp Asp Pro Ser Ser Phe Leu Ser Ala His Lys Leu
100     105     110
Ser Gly Leu Trp Asn Ser Pro His Ser Ser Gly Ala Met Pro Gly Ser
115     120     125
Ser Leu Gly Ser Pro Pro Thr Ile Pro Gly Ala
130     135

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<210> 3679  
 <211> 567

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3679

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 60  
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 120  
 gagatcgagc agatcaaggc ccagctggag acagccctga agtggaggaa ctatgaggtg  
 180  
 aagctgcggc tgctgctgca cctggaggaa ctgcagatgg agcatgatat ccggcactat  
 240  
 gacctggagt cgggtgcccac gacctgggac cctgtggacc agaaccaccag gctgctcagc  
 300  
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 360  
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 420  
 aagggtggaat tggaccgtgt caagctgagc ttttccatga gcctcctgag ccgctttgtg  
 480  
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 567

&lt;210&gt; 3680

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3680

Arg	Val	Lys	Gly	Tyr	Asp	Leu	Glu	Leu	Ser	Met	Ala	Leu	Gly	Thr	Tyr
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Tyr	Pro	Pro	Pro	Arg	Leu	Arg	Gln	Leu	Leu	Pro	Met	Leu	Leu	Gln	Gly
			20					25					30		
Thr	Ser	Ile	Phe	Thr	Ala	Pro	Lys	Glu	Ile	Ala	Glu	Ile	Lys	Ala	Gln
		35					40					45			
Leu	Glu	Thr	Ala	Leu	Lys	Trp	Arg	Asn	Tyr	Glu	Val	Lys	Leu	Arg	Leu
	50					55					60				
Leu	Leu	His	Leu	Glu	Glu	Leu	Gln	Met	Glu	His	Asp	Ile	Arg	His	Tyr
65					70				75					80	
Asp	Leu	Glu	Ser	Val	Pro	Met	Thr	Trp	Asp	Pro	Val	Asp	Gln	Asn	Pro
			85					90					95		
Arg	Leu	Leu	Thr	Leu	Glu	Val	Pro	Gly	Val	Thr	Glu	Ser	Arg	Pro	Ser
			100					105					110		
Val	Leu	Arg	Gly	Asp	His	Leu	Phe	Ala	Leu	Leu	Ser	Ser	Glu	Thr	His
		115				120						125			
Gln	Glu	Asp	Pro	Ile	Thr	Tyr	Lys	Gly	Phe	Val	His	Lys	Val	Glu	Leu
	130				135						140				
Asp	Arg	Val	Lys	Leu	Ser	Phe	Ser	Met	Ser	Leu	Ser	Arg	Phe	Val	
145				150					155					160	
Asp	Gly	Leu	Thr	Phe	Lys	Val	Asn	Phe	Thr	Phe	Asn	Arg	Gln	Pro	Leu
			165					170						175	
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180

185

<210> 3681  
 <211> 788  
 <212> DNA  
 <213> Homo sapiens

<400> 3681  
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<210> 3682  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<400> 3682  
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 Ala Ala Thr Ala Pro Gln Ala Pro Val Met Gly Ser Val Ser Ser Leu  
 20 25 30  
 Ile Ser Gly Arg Pro Cys Pro Gly Gly Pro Ala Pro Pro Arg His His  
 35 40 45  
 Gly Pro Pro Gly Pro Thr Phe Phe Arg Gln Gln Asp Gly Leu Leu Arg  
 50 55 60  
 Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala Val Pro Pro Arg  
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<400> 3683
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1020

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<210> 3684

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3684

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			20					25					30		
Cys	Lys	Val	Arg	Leu	Leu	Asp	Gly	Gly	Asp	Phe	Val	Ser	Leu	Ser	Ser
		35					40					45			
Arg	Glu	Glu	Val	Gln	Glu	Asn	Cys	Val	Arg	Trp	Arg	Lys	Arg	Phe	Thr
	50					55					60				
Phe	Val	Cys	Lys	Met	Ser	Ala	Asn	Pro	Ala	Thr	Gly	Leu	Leu	Asp	Pro
65					70				75					80	
Cys	Val	Phe	Arg	Val	Ser	Val	Arg	Lys	Glu	Leu	Lys	Gly	Gly	Lys	Ala
			85					90						95	
Tyr	Ser	Lys	Leu	Gly	Phe	Ala	Asp	Leu	Asn	Leu	Ala	Glu	Phe	Ala	Gly
			100					105					110		
Ser	Gly	Ser	Thr	Val	Arg	Cys	Cys	Leu	Leu	Glu	Gly	Tyr	Asp	Thr	Lys
		115					120					125			
Asn	Thr	Arg	Gln	Asp	Asn	Ser	Ile	Leu	Lys	Val	Thr	Ile	Gly	Met	Phe
	130					135					140				
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			165					170						175	
Gly	Gly	Gly	Thr	Ser	Ser	Gly	Gly	Ser	Ser	Thr	Asn	Ser	Leu	Thr	Gly
			180					185					190		
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Glu	Glu	Pro	Asp	Gln	Asn	Leu	Ser	Ser	Pro	Glu	Glu	Val	Phe	His	Ser
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Gly	His	Ser	Arg	Asn	Ser	Ser	Tyr	Ala	Ser	Gln	Gln	Ser	Lys	Ile	Ser
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Gly	Tyr	Ser	Thr	Glu	His	Ser	His	Ser	Ser	Ser	Leu	Ser	Asp	Leu	Thr
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His	Arg	Arg	Asn	Thr	Ser	Thr	Ser	Ser	Ser	Ala	Ser	Gly	Gly	Leu	Gly
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		275					280					285			
Glu	Lys	Pro	Pro	Arg	Pro	Pro	Arg	Pro	Leu	His	Leu	Ser	Asp	Arg	Ser
	290					295					300				
Phe	Arg	Arg	Lys	Lys	Asp	Ser	Val	Glu	Ser	His	Pro	Thr	Trp	Val	Asp
305					310					315				320	
Asp	Thr	Arg	Ile	Asp	Ala	Asp	Ala	Ile	Val	Glu	Lys	Ile	Val	Gln	Ser

				325					330					335	
Gln	Asp	Phe	Thr	Asp	Gly	Ser	Asn	Thr	Glu	Asp	Ser	Asn	Leu	Arg	Leu
				340					345					350	
Phe	Val	Ser	Arg	Asp	Gly	Ser	Ala	Thr	Leu	Ser	Gly	Ile	Gln	Leu	Ala
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Thr	Arg	Val	Ser	Ser	Gly	Val	Tyr	Glu	Pro	Val	Val	Ile	Glu	Ser	His
	370					375						380			

&lt;210&gt; 3685

&lt;211&gt; 1293

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3685

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120

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 <213> Homo sapiens

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<400> 3688  
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<210> 3689  
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&lt;210&gt; 3690

&lt;211&gt; 504

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3690

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Thr	Asp	Glu	Ala	Glu	Lys	Arg	Ser	Arg	Lys	Pro	Glu	Lys	Glu	Pro	Arg
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Gln	Cys	Cys	Asn	Pro	Pro	Leu	Ser	Glu	Glu	Met	Leu	Pro	Pro	Gly	Glu
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Ser Lys Arg Arg Arg Lys Glu Glu Thr Thr Gly Lys Asn Val Lys Lys		
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Thr Gln His Glu Leu Asp His Asn Gly Leu Val Pro Leu Pro Val Lys		
	260	265
Val Cys Phe Thr Cys Asn Arg Ser Cys Arg Val Ala Pro Leu Ile Gln		
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Cys Asp Tyr Cys Pro Leu Leu Phe His Met Asp Cys Leu Glu Pro Pro		
	290	295
Leu Thr Ala Met Pro Leu Gly Arg Trp Met Cys Pro Asn His Ile Glu		
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His Val Val Leu Asn Gln Lys Asn Met Thr Leu Ser Asn Arg Cys Gln		
	325	330
Val Phe Asp Arg Phe Gln Asp Thr Val Ser Gln His Val Val Lys Val		
	340	345
Asp Phe Leu Asn Arg Ile His Lys Lys His Pro Pro Asn Arg Arg Val		
	355	360
Leu Gln Ser Val Lys Arg Arg Ser Leu Lys Val Pro Asp Ala Ile Lys		
	370	375
Ser Gln Tyr Gln Phe Pro Pro Pro Leu Ile Ala Pro Ala Ala Ile Arg		
385	390	395
Asp Gly Glu Leu Ile Cys Asn Gly Ile Pro Glu Glu Ser Gln Met His		
	405	410
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Leu Cys Ser Val Val Ala Leu Gln Cys Ser Ile Leu Lys His Leu Ser		
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Ala Lys Gln Met Pro Ser His Trp Asp Ser Glu Gln Thr Glu Lys Ala		
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Asp Ile Lys Pro Val Ile Val Thr Asp Ser Ser Val Thr Thr Ser Leu		
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Pro Ser Gly Ile Ser Thr Gln Asn		
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&lt;210&gt; 3691

&lt;211&gt; 418

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3691

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<212> PRT

<213> Homo sapiens

<400> 3692

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			20					25					30		
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<210> 3693

<211> 2641

<212> DNA

<213> Homo sapiens

<400> 3693

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<211> 390

<212> PRT

<213> Homo sapiens

<400> 3694

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340	345	350
Ala Thr Ala Ile Ser Pro	Pro Leu Ser Val Ser	Ala Thr Ser Ser Pro
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&lt;211&gt; 1615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3695

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&lt;210&gt; 3696

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3696

Met	Val	Ile	Thr	Ile	Tyr	Tyr	Asp	Val	Lys	Val	Arg	Phe	Ile	Val	Arg
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Gly	Cys	Gly	Gln	Tyr	Ile	Ser	Tyr	Arg	Cys	Gln	Glu	Lys	Arg	Asn	Thr
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Tyr	Phe	Ala	Glu	Tyr	Trp	Tyr	Gln	Ala	Gln	Cys	Cys	Gln	Tyr	Asp	Tyr
		35					40					45			
Cys	Asn	Ser	Trp	Ser	Ser	Pro	Gln	Leu	Gln	Ser	Ser	Leu	Pro	Glu	Pro
	50					55					60				
His	Asp	Arg	Pro	Leu	Ala	Leu	Pro	Leu	Ser	Asp	Ser	Gln	Ile	Gln	Trp
65				70						75				80	
Phe	Tyr	Gln	Ala	Leu	Asn	Leu	Ser	Leu	Pro	Leu	Pro	Asn	Phe	His	Ala
		85						90					95		
Gly	Thr	Glu	Pro	Asp	Gly	Leu	Asp	Pro	Met	Val	Thr	Leu	Ser	Leu	Asn
		100					105					110			
Leu	Gly	Leu	Ser	Phe	Ala	Glu	Leu	Arg	Arg	Met	Tyr	Leu	Phe	Leu	Asn
	115					120						125			
Ser	Ser	Gly	Leu	Leu	Val	Leu	Pro	Gln	Ala	Gly	Leu	Leu	Thr	Pro	His
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Pro	Ser														
145															

&lt;210&gt; 3697

&lt;211&gt; 550

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3697

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&lt;210&gt; 3698

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3698

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 <212> DNA  
 <213> Homo sapiens

<400> 3699  
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<400> 3700  
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 35 40 45  
 Arg Asp Pro Asn Leu Pro Val His Ile Arg Gly Trp Leu His Lys Gln  
 50 55 60  
 Asp Ser Ser Gly Leu Arg Leu Trp Lys Arg Arg Trp Phe Val Leu Ser  
 65 70 75 80  
 Gly His Cys Leu Phe Tyr Tyr Lys Asp Ser Arg Glu Glu Ser Val Leu  
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<210> 3701  
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 <212> DNA  
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<400> 3701

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&lt;210&gt; 3702

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3702

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			20					25					30		
Ser	Asn	Leu	Lys	Glu	His	Lys	Lys	Thr	His	Thr	Ala	Asp	Lys	Val	Phe
	35					40						45			
Thr	Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Asn	Met	Gln	Arg	Lys	Leu	Val
	50					55					60				
Lys	His	Arg	Ile	Arg	His	Thr	Gly	Glu	Arg	Pro	Tyr	Ser	Cys	Ser	Ala
65					70					75					80
Cys	Gly	Lys	Cys	Phe	Gly	Gly	Ser	Gly	Asp	Leu	Arg	Arg	His	Val	Arg
				85					90					95	
Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Ile	Cys	Asn	Lys	Cys
			100					105					110		
Phe	Thr	Arg	Ser	Ala	Val	Leu	Arg	His	Lys	Lys	Met	His	Cys	Lys	
		115					120				125				
Ala	Gly	Asp	Glu	Ser	Pro	Asp	Val	Leu	Glu	Glu	Leu	Ser	Gln	Ala	Ile
	130					135					140				
Glu	Thr	Ser	Asp	Leu	Glu	Lys	Ser	Gln	Ser	Ser	Asp	Ser	Phe	Ser	Gln
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Asp	Thr	Ser	Val	Thr	Leu	Met	Pro	Val	Ser	Val	Lys	Leu	Pro	Val	His

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<210> 3703
<211> 3294
<212> DNA
<213> Homo sapiens
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2850



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<210> 3704

<211> 619

<212> PRT

<213> Homo sapiens

<400> 3704

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			20					25					30		
Leu	His	Leu	Leu	Lys	Ser	Ser	Cys	Ala	Pro	Ser	Val	Gln	Met	Lys	Ile
		35					40					45			
Lys	Glu	Leu	Tyr	Arg	Arg	Arg	Phe	Pro	Arg	Lys	Thr	Leu	Gly	Pro	Ser
	50					55					60				
Asp	Leu	Ser	Leu	Leu	Ser	Leu	Pro	Pro	Gly	Thr	Ser	Pro	Val	Gly	Ser
	65				70					75				80	
Pro	Gly	Pro	Leu	Ala	Pro	Ile	Pro	Pro	Thr	Leu	Leu	Ala	Pro	Gly	Thr
			85						90					95	
Leu	Leu	Gly	Pro	Lys	Arg	Glu	Val	Asp	Met	His	Pro	Pro	Leu	Pro	Gln
			100					105						110	
Pro	Val	His	Pro	Asp	Val	Thr	Met	Lys	Pro	Leu	Pro	Phe	Tyr	Glu	Val
		115					120					125			
Tyr	Gly	Glu	Leu	Ile	Arg	Pro	Thr	Thr	Leu	Ala	Ser	Thr	Ser	Ser	Gln
	130					135					140				
Arg	Phe	Glu	Glu	Ala	His	Phe	Thr	Phe	Ala	Leu	Thr	Pro	Gln	Gln	Val
	145				150					155					160
Gln	Gln	Ile	Leu	Thr	Ser	Arg	Glu	Val	Leu	Pro	Gly	Ala	Lys	Cys	Asp
			165						170					175	
Tyr	Thr	Ile	Gln	Val	Gln	Leu	Arg	Phe	Cys	Leu	Cys	Glu	Thr	Ser	Cys
			180					185					190		
Pro	Gln	Glu	Asp	Tyr	Phe	Pro	Pro	Asn	Leu	Phe	Val	Lys	Val	Asn	Gly
		195					200					205			
Lys	Leu	Cys	Pro	Leu	Pro	Gly	Tyr	Leu	Pro	Pro	Thr	Lys	Asn	Gly	Ala
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          260          265          270
Ala Gly Thr Leu Leu Gln Lys Leu Arg Ala Lys Gly Ile Arg Asn Pro
          275          280          285
Asp His Ser Arg Ala Leu Ile Lys Glu Lys Leu Thr Ala Asp Pro Asp
          290          295          300
Ser Glu Val Ala Thr Thr Ser Leu Arg Val Ser Leu Met Cys Pro Leu
305          310          315          320
Gly Lys Met Arg Leu Thr Val Pro Cys Arg Ala Leu Thr Cys Ala His
          325          330          335
Leu Gln Ser Phe Asp Ala Ala Leu Tyr Leu Gln Met Asn Glu Lys Lys
          340          345          350
Pro Thr Trp Thr Cys Pro Val Cys Asp Lys Lys Ala Pro Tyr Glu Ser
          355          360          365
Leu Ile Ile Asp Gly Leu Phe Met Glu Ile Leu Ser Ser Cys Ser Asp
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Cys Asp Glu Ile Gln Phe Met Glu Asp Gly Ser Trp Cys Pro Met Lys
385          390          395          400
Pro Lys Lys Glu Ala Ser Glu Val Cys Pro Pro Pro Gly Tyr Gly Leu
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Asp Gly Leu Gln Tyr Ser Pro Val Gln Gly Gly Asp Pro Ser Glu Asn
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Lys Lys Lys Val Glu Val Ile Asp Leu Thr Ile Glu Ser Ser Ser Asp
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Glu Ser Gln His Tyr Gly Pro Ser Val Ile Thr Ser Leu Asp Glu Gln
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545          550          555          560
Leu Gly Pro Leu Ala Pro Thr Leu Gly Ser Ser His Cys Ser Ala Thr
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Pro Ala Pro Pro Pro Gly Arg Val Ser Ser Ile Val Ala Pro Gly Gly
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&lt;210&gt; 3705

&lt;211&gt; 1737

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3705

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<210> 3706

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3706

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			20					25					30		
Ser	Arg	Gln	Gly	Gln	Gly	Thr	Glu	Ala	Gly	Met	Glu	Ala	Gly	Thr	Glu
		35				40					45				
Ala	Gly	Thr	Glu	Ala	Gly	Arg	Val	Gly	Gly	Val	Thr	Val	Glu	Gln	Gly
	50					55					60				
Lys	Ser	Leu	Ile	Asn	Tyr	Glu	Pro	His	Gly	Thr	Arg	Thr	Ala	Gly	Phe
65				70					75					80	
Thr	Ala	His	Pro	Pro	Lys	Ser	Thr	Ser	Val	Cys	Val	Cys	Xaa	Arg	Gln
			85						90					95	
His	Ile	Cys	Thr	Cys	Val	Cys	Met	Cys	Val	Arg	Lys	Cys	Val	Pro	Arg
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Gln	His	Ile	Cys	Met	Cys	Ala	Cys	Val	Cys	Ile	Arg	Thr	Ala	Ile	Cys
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<210> 3707

<211> 585

<212> DNA

<213> Homo sapiens

<400> 3707

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<210> 3708

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3708

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<210> 3709

<211> 3768

<212> DNA

<213> Homo sapiens

<400> 3709

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<211> 70

<212> PRT

<213> Homo sapiens

<400> 3710

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			20					25					30		
Cys	Asp	Val	Ile	Leu	Val	Ala	Gly	Asp	Arg	Arg	Ile	Pro	Ala	His	Arg
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Leu	Val	Leu	Ser	Ser	Val	Ser	Asp	Tyr	Phe	Ala	Ala	Met	Phe	Thr	Asn
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<211> 1366

<212> DNA

<213> Homo sapiens

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<210> 3712

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3712

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	50					55					60				
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Ser	Glu	Ala	Ser	Asp	Leu	Lys	Val	Ile	His	Trp	Asn	Ser	Pro	Lys	Lys
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&lt;210&gt; 3713

&lt;211&gt; 1719

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3713

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<211> 488

<212> PRT

<213> Homo sapiens

<400> 3714

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His	Val	Thr	Asp	Ser	Glu	Asn	Asp	Glu	Pro	Leu	Asn	Leu	Asn	Ala	Ser
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Asp	Ser	Glu	Ser	Glu	Glu	Leu	His	Arg	Gln	Lys	Asp	Ser	Asp	Ser	Glu
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Ser	Glu	Glu	Arg	Ala	Glu	Pro	Pro	Ala	Ser	Asp	Ser	Glu	Asn	Glu	Asp
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 Glu Asp Glu Glu Lys Ala Ser Ala Lys Lys Ser Arg Val Val Ser Asp  
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&lt;211&gt; 288

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3715

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120

cacttggaga aacatcgaaa ggacaaagcc cacaaacgct atctgcta at gagcattgac  
 180  
 cagaggaaaa agatgctcaa aaacctccgt aacaccaact atgatgtctt tgagaagata  
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 <213> Homo sapiens

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 35 40 45  
 Lys Ala His Lys Arg Tyr Leu Leu Met Ser Ile Asp Gln Arg Lys Lys  
 50 55 60  
 Met Leu Lys Asn Leu Arg Asn Thr Asn Tyr Asp Val Phe Glu Lys Ile  
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 <213> Homo sapiens

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 120  
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 180  
 ttagcaagat aaaagtgtgg atttttgtga aagggtacaca ttttctttaa caagtaaaag  
 240  
 tttcagatca ttattgat at ttacttattt taaagtaaag gcattacaca ctcaacattt  
 300  
 ggcctgatct gatTTTTTaaa cttcatccct aggattgata ttgctgatga tattatta at  
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 gccagtga aa gtaacagaga ctgttcaaaa cctgtggcta gactaattt agacaatgaa  
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 540  
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 600  
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 780  
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 840  
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 960  
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 1200  
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 1260  
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&lt;210&gt; 3718

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3718

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Gly	Ile	Leu	Leu	Glu	Pro	Cys	Ser	Asp	Arg	Gly	Asp	Ser	Glu	Asp	Gly
		20						25					30		
Cys	Leu	Glu	Arg	Glu	Glu	Tyr	Leu	Leu	Phe	Asp	Ser	Asp	Lys	Leu	Ser
		35					40					45			
His	Leu	Ile	Leu	Asp	Ser	Ser	Ser	Lys	Ile	Cys	Asp	Leu	Asn	Ala	Asn
	50					55					60				
Thr	Glu	Ser	Glu	Val	Pro	Gly	Gly	Gln	Ser	Val	Gly	Val	Gln	Gly	Glu
65				70				75					80		
Ala	Ala	Cys	Val	Ser	Ile	Pro	His	Leu	Asp	Leu	Lys	Asn	Val	Ser	Asp
			85					90					95		
Gly	Asp	Lys	Trp	Glu	Glu	Pro	Phe	Pro	Ala	Phe	Lys	Ser	Trp	Gln	Glu
		100						105					110		
Asp	Ser	Glu	Ser	Gly	Glu	Ala	Gln	Leu	Ser	Pro	Gln	Ala	Gly	Arg	Met
		115					120				125				
Asn	His	His	Pro	Leu	Glu	Glu	Asp	Cys	Pro	Pro	Val	Leu	Ser	His	Arg

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      130              135              140
Ser Leu Asp Phe Gly Gln Ser Gln Arg Phe Leu His Asp Pro Glu Lys
145              150              155              160
Leu Asp Ser Ser Ser Lys Ala Leu Ser Phe Thr Arg Ile Arg Arg Ser
      165              170              175
Ser Phe Ser Ser Lys Asp Glu Lys Arg Glu Asp Arg Thr Pro Tyr Gln
      180              185              190
Leu Val Lys Lys Leu Gln Lys Lys Ile Arg Gln Phe Glu Glu Gln Phe
      195              200              205
Glu Arg Glu Arg Asn Ser Lys Pro Ser Tyr Ser Asp Ile Ala Ala Asn
      210              215              220
Pro Lys Val Leu Lys Trp Met Thr Glu Leu Thr Lys Leu Arg Lys Gln
225              230              235              240
Ile Lys Asp Ala Lys His Lys Asn Ser Asp Gly Glu Phe Val Pro Gln
      245              250              255
Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu
      260              265              270
Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys
      275              280              285
Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg
      290              295              300
Leu Lys Glu Lys Arg Ile Glu Arg Cys Leu Pro Glu Asp Ile Lys Lys
305              310              315              320
Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser
      325              330              335
Leu Leu Tyr Tyr Glu Ser Gln His Gly Arg Pro Val Thr Lys Glu Glu
      340              345              350
Arg His Ile Val Lys Pro Leu Tyr Asp Arg Tyr Arg Leu Val Lys Gln
      355              360              365
Met Leu Thr Arg Ala Ser
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&lt;210&gt; 3719

&lt;211&gt; 422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3719

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180
cagcccggtt gcaaaaatgt gtgttttgat gacttcttcc ccatttccca agtcagactt
240
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nn
422

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240
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<210> 3722

<211> 1216

<212> PRT

<213> Homo sapiens

<400> 3722

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			20					25					30		
Ala	Tyr	Pro	Phe	Asn	Ala	Lys	Gln	Pro	Thr	Asp	Met	Ala	Arg	Arg	Gln
			35				40					45			
Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
		50				55					60				
Ala	Phe	Leu	Asn	Gly	Glu	Thr	Gln	Ile	Met	Ala	Asp	Glu	Ala	Phe	Met
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Asn	Ala	Val	Gln	Ser	Tyr	Tyr	Glu	Val	Phe	Leu	Lys	Ser	Asp	Arg	Val
				85					90					95	
Ala	Arg	Met	Val	Gln	Ser	Gly	Gly	Cys	Ser	Ala	Asn	Asp	Ser	Arg	Glu
			100					105					110		
Val	Phe	Lys	Lys	His	Ile	Glu	Lys	Arg	Val	Arg	Ser	Leu	Pro	Glu	Ile
			115				120					125			
Asp	Gly	Leu	Ser	Lys	Glu	Thr	Val	Leu	Ser	Ser	Trp	Met	Ala	Lys	Phe
		130				135					140				
Asp	Ala	Ile	Tyr	Arg	Gly	Glu	Glu	Asp	Pro	Arg	Lys	Gln	Gln	Ala	Arg
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Met	Thr	Ala	Ser	Ala	Ala	Ser	Glu	Leu	Ile	Leu	Ser	Lys	Glu	Gln	Leu

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Tyr Glu Met Phe Gln Asn Ile Leu Gly Ile Lys Lys Phe Glu His Gln
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Gln Ile Arg Arg Glu Leu Asp Gly Arg Leu Gln Met Ala Asp Gln Ile
210      215      220
Ala Arg Glu Arg Lys Phe Pro Lys Phe Val Ser Lys Glu Met Glu Asn
225      230      235      240
Met Tyr Ile Glu Glu Leu Lys Ser Ser Val Asn Leu Leu Met Ala Asn
245      250      255
Leu Glu Ser Met Pro Val Ser Lys Gly Gly Glu Phe Lys Leu Gln Lys
260      265      270
Leu Lys Arg Ser His Asn Ala Ser Ile Ile Asp Met Gly Glu Glu Ser
275      280      285
Glu Asn Gln Leu Ser Lys Ser Asp Val Val Leu Ser Phe Ser Leu Glu
290      295      300
Val Val Ile Met Glu Val Gln Gly Leu Lys Ser Leu Ala Pro Asn Arg
305      310      315      320
Ile Val Tyr Cys Thr Met Glu Val Glu Gly Gly Glu Lys Leu Gln Thr
325      330      335
Asp Gln Ala Glu Ala Ser Lys Pro Thr Trp Gly Thr Gln Gly Asp Phe
340      345      350
Ser Thr Thr His Ala Leu Pro Ala Val Lys Val Lys Leu Phe Thr Glu
355      360      365
Ser Thr Gly Val Leu Ala Leu Glu Asp Lys Glu Leu Gly Arg Val Ile
370      375      380
Leu His Pro Thr Pro Asn Ser Pro Lys Gln Ser Glu Trp His Lys Met
385      390      395      400
Thr Val Ser Lys Asn Cys Pro Asn Gln Asp Leu Lys Ile Lys Leu Ala
405      410      415
Val Arg Met Asp Lys Pro Gln Asn Met Lys His Ser Gly Tyr Leu Trp
420      425      430
Ala Ile Gly Lys Asn Val Trp Lys Arg Trp Lys Lys Arg Phe Phe Val
435      440      445
Leu Val Gln Val Ser Gln Tyr Thr Phe Ala Met Cys Ser Tyr Arg Glu
450      455      460
Lys Lys Ala Glu Pro Gln Glu Leu Leu Gln Leu Asp Gly Tyr Thr Val
465      470      475      480
Asp Tyr Thr Asp Pro Gln Pro Gly Leu Glu Gly Gly Arg Ala Phe Phe
485      490      495
Asn Ala Val Lys Glu Gly Asp Thr Val Ile Phe Ala Ser Asp Asp Glu
500      505      510
Gln Asp Arg Ile Leu Trp Val Gln Ala Met Tyr Arg Ala Thr Gly Gln
515      520      525
Ser His Lys Pro Val Pro Pro Thr Gln Val Gln Lys Leu Asn Ala Lys
530      535      540
Gly Gly Asn Val Pro Gln Leu Asp Ala Pro Ile Ser Gln Phe Ser Gly
545      550      555      560
Leu Lys Asp Ala Asp Arg Ala Gln Lys His Gly Met Asp Glu Phe Ile
565      570      575
Ser Ser Asn Pro Cys Asn Phe Asp His Ala Ser Leu Phe Glu Met Val
580      585      590
Gln Arg Leu Thr Leu Asp His Arg Leu Asn Asp Ser Tyr Ser Cys Leu

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Leu	Leu	Glu	Arg	Ala	Glu	Asn	Gly	Ala	Met	Ile	Asp	Pro	Thr	Leu	Leu
645					650					655					
His	Tyr	Ser	Phe	Ala	Phe	Cys	Ala	Ser	His	Val	His	Gly	Asn	Arg	Pro
660					665					670					
Asp	Gly	Ile	Gly	Thr	Val	Thr	Val	Glu	Glu	Lys	Glu	Arg	Phe	Glu	Glu
675					680					685					
Ile	Lys	Glu	Arg	Leu	Arg	Val	Leu	Leu	Glu	Asn	Gln	Ile	Thr	His	Phe
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Arg	Tyr	Cys	Phe	Pro	Phe	Gly	Arg	Pro	Glu	Gly	Ala	Leu	Lys	Ala	Thr
705					710					715					
Leu	Ser	Leu	Leu	Glu	Arg	Val	Leu	Met	Lys	Asp	Ile	Val	Thr	Pro	Val
725					730					735					
Pro	Gln	Glu	Glu	Val	Lys	Thr	Val	Ile	Arg	Lys	Cys	Leu	Glu	Gln	Ala
740					745					750					
Ala	Leu	Val	Asn	Tyr	Ser	Arg	Leu	Ser	Glu	Tyr	Ala	Lys	Ile	Glu	Glu
755					760					765					
Asn	Gln	Lys	Asp	Ala	Glu	Asn	Val	Gly	Arg	Leu	Ile	Thr	Pro	Ala	Lys
770					775					780					
Lys	Leu	Glu	Asp	Thr	Ile	Arg	Leu	Ala	Glu	Leu	Val	Ile	Glu	Val	Leu
785					790					795					
Gln	Gln	Asn	Glu	Glu	His	His	Ala	Glu	Pro	His	Val	Asp	Lys	Gly	Glu
805					810					815					
Ala	Phe	Ala	Trp	Trp	Ser	Asp	Leu	Met	Val	Glu	His	Ala	Glu	Thr	Phe
820					825					830					
Leu	Ser	Leu	Phe	Ala	Val	Asp	Met	Asp	Ala	Ala	Leu	Glu	Val	Gln	Pro
835					840					845					
Pro	Asp	Thr	Trp	Asp	Ser	Phe	Pro	Leu	Phe	Gln	Leu	Leu	Asn	Asp	Phe
850					855					860					
Leu	Arg	Thr	Asp	Tyr	Asn	Leu	Cys	Asn	Gly	Lys	Phe	His	Lys	His	Leu
865					870					875					
Gln	Asp	Leu	Phe	Ala	Pro	Leu	Val	Val	Arg	Tyr	Val	Asp	Leu	Met	Glu
885					890					895					
Ser	Ser	Ile	Ala	Gln	Ser	Ile	His	Arg	Gly	Phe	Glu	Arg	Glu	Ser	Trp
900					905					910					
Glu	Pro	Val	Asn	Asn	Gly	Ser	Gly	Thr	Ser	Glu	Asp	Leu	Phe	Trp	Lys
915					920					925					
Leu	Asp	Ala	Leu	Gln	Thr	Phe	Ile	Arg	Asp	Leu	His	Trp	Pro	Glu	Glu
930					935					940					
Glu	Phe	Gly	Lys	His	Leu	Glu	Gln	Arg	Leu	Lys	Leu	Met	Ala	Ser	Asp
945					950					955					
Met	Ile	Glu	Ser	Cys	Val	Lys	Arg	Thr	Arg	Ile	Ala	Phe	Glu	Val	Lys
965					970					975					
Leu	Gln	Lys	Thr	Ser	Arg	Ser	Thr	Asp	Phe	Arg	Val	Pro	Gln	Ser	Ile
980					985					990					
Cys	Thr	Met	Phe	Asn	Val	Met	Val	Asp	Ala	Lys	Ala	Gln	Ser	Thr	Lys
995					1000					1005					
Leu	Cys	Ser	Met	Glu	Met	Gly	Gln	Glu	Phe	Ala	Lys	Met	Trp	His	Gln
1010					1015					1020					
Tyr	His	Ser	Lys	Ile	Asp	Glu	Leu	Ile	Glu	Glu	Thr	Val	Lys	Glu	Met

1025					1030					1035					1040
Ile	Thr	Leu	Leu	Val	Ala	Lys	Phe	Val	Thr	Ile	Leu	Glu	Gly	Val	Leu
					1045					1050					1055
Ala	Lys	Leu	Ser	Arg	Tyr	Asp	Glu	Gly	Thr	Leu	Phe	Ser	Ser	Phe	Leu
					1060					1065					1070
Ser	Phe	Thr	Val	Lys	Ala	Ala	Ser	Lys	Tyr	Val	Asp	Val	Pro	Lys	Pro
					1075					1080					1085
Gly	Met	Asp	Val	Ala	Asp	Ala	Tyr	Val	Thr	Phe	Val	Arg	His	Ser	Gln
					1090					1095					1100
Asp	Val	Leu	Arg	Asp	Lys	Val	Asn	Glu	Glu	Met	Tyr	Ile	Glu	Arg	Leu
1105						1110					1115				1120
Phe	Asp	Gln	Trp	Tyr	Asn	Ser	Ser	Met	Asn	Val	Ile	Cys	Thr	Trp	Leu
					1125					1130					1135
Thr	Asp	Arg	Met	Asp	Leu	Gln	Leu	His	Ile	Tyr	Gln	Leu	Lys	Thr	Leu
					1140					1145					1150
Ile	Arg	Met	Val	Lys	Lys	Thr	Tyr	Arg	Asp	Phe	Arg	Leu	Gln	Gly	Val
					1155					1160					1165
Leu	Asp	Ser	Thr	Leu	Asn	Ser	Lys	Thr	Tyr	Glu	Thr	Ile	Arg	Asn	Arg
					1170					1175					1180
Leu	Thr	Val	Glu	Glu	Ala	Thr	Ala	Ser	Val	Ser	Glu	Gly	Gly	Gly	Leu
1185						1190					1195				1200
Gln	Gly	Ile	Ser	Met	Lys	Asp	Ser	Asp	Glu	Glu	Asp	Glu	Glu	Asp	Asp
					1205					1210					1215

<210> 3723

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3723

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120  
aaccccaacg agaagctgaa ggtgaacttt gggaccccag agttcctgtc acctgaggtg  
180  
gtgaattatg accaaatctc cgataagaca gacatgtgga gtatgggggt gatcacctac  
240  
atgctgctga gcggcctctc ccccttctctg ggagatgatg acacagagac cctaaacaac  
300  
gttctatctg gcaactggta ctttgatgaa gagacctttg aggccgtatc agacgaggcc  
360  
aaagactttg tctccaacct catcgtcaag gaccagaggg cccggatgaa cgctgcccg  
420  
tgtctgccc atccctggct caacaacctg gcggagaaag ccaaacgctg taaccgacgc  
480  
cttaagtccc agatcttgct taagaaatac ctcatgaaga ggcgctggaa gaaaaacttc  
540  
attgctgtca gcgctgccaa ccgcttcaag aagatcagca gctcgggggc actgatggct  
600  
ctgggggtct gagccctggg cgcagctgaa gcctggacgc agccacacag tggccggggc  
660  
tgaagccaca cagcccagaa ggccagaaaa ggcagccaga tccccagggc agcctcgtaa  
720

ggacaaggct gtgccaggct gggaggctcg gggctcccca cgcccccatg cagtgaccgc  
780  
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830

<210> 3724  
<211> 203  
<212> PRT  
<213> Homo sapiens

<400> 3724  
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Glu Asn Ile Leu Cys Val Asn Thr Thr Gly His Leu Val Lys Ile Ile  
20 25 30  
Asp Phe Gly Leu Ala Arg Arg Tyr Asn Pro Asn Glu Lys Leu Lys Val  
35 40 45  
Asn Phe Gly Thr Pro Glu Phe Leu Ser Pro Glu Val Val Asn Tyr Asp  
50 55 60  
Gln Ile Ser Asp Lys Thr Asp Met Trp Ser Met Gly Val Ile Thr Tyr  
65 70 75 80  
Met Leu Leu Ser Gly Leu Ser Pro Phe Leu Gly Asp Asp Asp Thr Glu  
85 90 95  
Thr Leu Asn Asn Val Leu Ser Gly Asn Trp Tyr Phe Asp Glu Glu Thr  
100 105 110  
Phe Glu Ala Val Ser Asp Glu Ala Lys Asp Phe Val Ser Asn Leu Ile  
115 120 125  
Val Lys Asp Gln Arg Ala Arg Met Asn Ala Ala Gln Cys Leu Ala His  
130 135 140  
Pro Trp Leu Asn Asn Leu Ala Glu Lys Ala Lys Arg Cys Asn Arg Arg  
145 150 155 160  
Leu Lys Ser Gln Ile Leu Leu Lys Lys Tyr Leu Met Lys Arg Arg Trp  
165 170 175  
Lys Lys Asn Phe Ile Ala Val Ser Ala Ala Asn Arg Phe Lys Lys Ile  
180 185 190  
Ser Ser Ser Gly Ala Leu Met Ala Leu Gly Val  
195 200

<210> 3725  
<211> 1244  
<212> DNA  
<213> Homo sapiens

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120  
gaccatcttc acttttgttt tcaggccttt aaaattgtgc cctacaacac agagaccctt  
180  
gataaactgc taaccgaatc cctgaagaac aatatccctg caagcggact gcacctcttt  
240  
ggaatcaacc agctggaaga agaagatatg atgacaaatc agagggatga agagctgccc  
300



accctgttgc attttgctgc gaagtatgga ctgaagaacc tcaactgcctt gttgctcacc  
 360  
 tgcccaggag ccctgcaggc gtacagcgtg gccacaagc atggccacta ccccaacacc  
 420  
 atcgctgaga aacacggctt caggacctg cggcagttca tcgacgagta tgtggaaaag  
 480  
 gtggacatgc tcaagagtca cattaagag gaactgatgc acggggagga ggctgatgct  
 540  
 gtgtacgagt ccatggccca cttttccaca gacctgctta tgaaatgctc gctcaacccc  
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 ggctgtgacg aggatctcta tgagtccatg gctgcctttg tcccagctgc cactgaagac  
 660  
 ctctatgttg aaatgcttca ggccagtaca tctaaccxaa tccctggaga tggtttctct  
 720  
 cgggccacta aggactctat gatccgcaag tttttagaag gcaacagcat gggaatgacc  
 780  
 aatctggaga gagatcagtg ccatcttggt caggaagaag atgtttatca cacggtggat  
 840  
 gacgatgagg ccttttctgt ggacttggcc agcaggcccc ctgtcccagt gccagacca  
 900  
 gagaccactg ctctgggtgc tcaccagctg cctgacaacg aaccatacat ttttaaaggc  
 960  
 aagtatggca gggaatgatg tccaactggt tctttggagc ttctcaacag ggatttcctg  
 1020  
 gatgacctgg ctttttgaac cattgctcag agactatccc cttctaaatg gtcttcaccc  
 1080  
 agccctacga gacaggggtc atatcctggg gccagattct ggagctagaa taggagtaat  
 1140  
 gaccagagtc agtgctggcc ttcttggaag tatttacgca cagttgcaaa ggcaggtaaa  
 1200  
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 1244

&lt;210&gt; 3726

&lt;211&gt; 325

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3726

Xaa Ile His Val Ser Gly Lys Asp Ile Thr Arg Lys Pro Glu Ile Ser  
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 Gly His Val Ile Ser Ala His Gly Leu Ser Val Leu Asn Leu Arg Asp  
 20 25 30  
 Gly Arg Glu Leu Asp Phe Arg Ser Asp His Leu His Phe Cys Phe Gln  
 35 40 45  
 Ala Phe Lys Ile Val Pro Tyr Asn Thr Glu Thr Leu Asp Lys Leu Leu  
 50 55 60  
 Thr Glu Ser Leu Lys Asn Asn Ile Pro Ala Ser Gly Leu His Leu Phe  
 65 70 75 80  
 Gly Ile Asn Gln Leu Glu Glu Asp Met Met Thr Asn Gln Arg Asp  
 85 90 95  
 Glu Glu Leu Pro Thr Leu Leu His Phe Ala Ala Lys Tyr Gly Leu Lys  
 100 105 110  
 Asn Leu Thr Ala Leu Leu Leu Thr Cys Pro Gly Ala Leu Gln Ala Tyr

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      115              120              125
Ser Val Ala Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys
      130              135              140
His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr
      145              150              155              160
Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu
      165              170              175
Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu
      180              185              190
Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu
      195              200              205
Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu
      210              215              220
Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser
      225              230              235              240
Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser
      245              250              255
Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu
      260              265              270
Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp
      275              280              285
Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala
      290              295              300
Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly
      305              310              315              320
Lys Tyr Gly Arg Glu
      325

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<210> 3727

<211> 630

<212> DNA

<213> Homo sapiens

<400> 3727

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120
ctcgaccccg ctgagaaaca agaaacaggc tgtcctcctt tgggtctgga gtccctgcga
180
gtttcagata gccggcttga ggcattccagc agccagtcct ttggtcttgg accacaccga
240
ggacgggtca acattcagtc aggcctggag gacggcgatc tatatgatgg agcctgggtg
300
gctgaggagc aggacgccga tccatggttt caggtggacg ctgggcaccc caccgccttc
360
tcgggtgtta tcacacaggg caggaactct gtctggaggt atgactgggt cacatcatac
420
aaggtccagt tcagcaatga cagtcggacc tgggtgggaa gtaggaacca cagcagtggg
480
atggacgcag tatttctctgc caattcagac ccagaaactc cagtgtctgaa cctctgccg
540
gagccccagg tggcccgctt cattcgctg ctgccccaga cctggctcca gggaggcgcg
600

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630

<210> 3728  
<211> 210  
<212> PRT  
<213> Homo sapiens

<400> 3728  
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Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu  
20 25 30  
Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu  
35 40 45  
Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser  
50 55 60  
Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg  
65 70 75 80  
Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp  
85 90 95  
Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val  
100 105 110  
Asp Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg  
115 120 125  
Asn Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe  
130 135 140  
Ser Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly  
145 150 155 160  
Met Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu  
165 170 175  
Asn Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro  
180 185 190  
Gln Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu  
195 200 205  
Ala Cys  
210

<210> 3729  
<211> 1552  
<212> DNA  
<213> Homo sapiens

<400> 3729  
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120  
atcaagttat cagcagatgt caaaccattt gtccccagat ttgccgggct caatgtggca  
180  
tggttagagt cctcagaagc atgtgtcttc ccagctctg cagccacata ctatccgttt  
240  
gttcaggaac caccagtgc agagcagaaa atatatactg aagacatggc ctttggagct  
300

tcaacttttc cacctcagta tttatcttct gagataactc ttcattccata tgcctattct  
 360  
 ccttataccc ttgactccac acagaatggt tactcagtgc ctgggtccca gtatctttat  
 420  
 aaccaaccca gttgttaccg aggtttttcaa acagtgaagc atcgaaatga gaacacatgc  
 480  
 cctctccac aagaaatgaa agctctgttt aagaagaaaa cctatgatga gaaaaaacg  
 540  
 tatgatcagc aaaagtttga cagtgaagg gctgatggaa ctatatcatc tgagataaaa  
 600  
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 660  
 taccataagc gaacagacag gaaatccaga atcattgcaa aaaatgtatc tacctccaaa  
 720  
 cctgagtttg aatttaccac actggacttt cctgaactgc aagggtgcaga gaacaatatg  
 780  
 tcagagatac agaagcaacc caagtgggga cctgtccact ctgtctctac cgacatttct  
 840  
 cttctaagag aagtagtaaa accagctgca gtgttatcaa agggtgaaat agtggtgaaa  
 900  
 aataacccaa atgaatctgt aactgcta atgcccgtacca attctccttc atgtacaaga  
 960  
 gagttatctt ggacaccaat gggttatggt gttcgacaga cattatctac agaactgtca  
 1020  
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 1080  
 cctaaaaatg ttagtataacc atcttctgaa gctttatctt cggatccttc ctacaacaaa  
 1140  
 gaaaaacaca ttattcatcc taccctaaaag tctaaagcat cacaaggtag tgaccttgaa  
 1200  
 caaatgaag cctcaagaaa gaataagaaa aagaaagaaa aatctacatc aaaatatgaa  
 1260  
 gtcctgacag ttcaagagcc tccaaggatt gaagatgccg aggaatttcc caacctggca  
 1320  
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 1380  
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 1440  
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 1552

&lt;210&gt; 3730

&lt;211&gt; 422

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3730

Met Ala Phe Gly Ala Ser Thr Phe Pro Pro Gln Tyr Leu Ser Ser Glu  
 1 5 10 15  
 Ile Thr Leu His Pro Tyr Ala Tyr Ser Pro Tyr Thr Leu Asp Ser Thr  
 20 25 30  
 Gln Asn Val Tyr Ser Val Pro Gly Ser Gln Tyr Leu Tyr Asn Gln Pro

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      35      40      45
Ser Cys Tyr Arg Gly Phe Gln Thr Val Lys His Arg Asn Glu Asn Thr
  50      55      60
Cys Pro Leu Pro Gln Glu Met Lys Ala Leu Phe Lys Lys Lys Thr Tyr
  65      70      75      80
Asp Glu Lys Lys Thr Tyr Asp Gln Gln Lys Phe Asp Ser Glu Arg Ala
      85      90      95
Asp Gly Thr Ile Ser Ser Glu Ile Lys Ser Ala Arg Gly Ser His His
      100      105      110
Leu Ser Ile Tyr Ala Glu Asn Ser Leu Lys Ser Asp Gly Tyr His Lys
      115      120      125
Arg Thr Asp Arg Lys Ser Arg Ile Ile Ala Lys Asn Val Ser Thr Ser
      130      135      140
Lys Pro Glu Phe Glu Phe Thr Thr Leu Asp Phe Pro Glu Leu Gln Gly
  145      150      155      160
Ala Glu Asn Asn Met Ser Glu Ile Gln Lys Gln Pro Lys Trp Gly Pro
      165      170      175
Val His Ser Val Ser Thr Asp Ile Ser Leu Leu Arg Glu Val Val Lys
      180      185      190
Pro Ala Ala Val Leu Ser Lys Gly Glu Ile Val Val Lys Asn Asn Pro
      195      200      205
Asn Glu Ser Val Thr Ala Asn Ala Ala Thr Asn Ser Pro Ser Cys Thr
      210      215      220
Arg Glu Leu Ser Trp Thr Pro Met Gly Tyr Val Val Arg Gln Thr Leu
  225      230      235      240
Ser Thr Glu Leu Ser Ala Ala Pro Lys Asn Val Thr Ser Met Ile Asn
      245      250      255
Leu Lys Thr Ile Ala Ser Ser Ala Asp Pro Lys Asn Val Ser Ile Pro
      260      265      270
Ser Ser Glu Ala Leu Ser Ser Asp Pro Ser Tyr Asn Lys Glu Lys His
      275      280      285
Ile Ile His Pro Thr Gln Lys Ser Lys Ala Ser Gln Gly Ser Asp Leu
      290      295      300
Glu Gln Asn Glu Ala Ser Arg Lys Asn Lys Lys Lys Glu Lys Ser
  305      310      315      320
Thr Ser Lys Tyr Glu Val Leu Thr Val Gln Glu Pro Pro Arg Ile Glu
      325      330      335
Asp Ala Glu Glu Phe Pro Asn Leu Ala Val Ala Ser Glu Arg Arg Asp
      340      345      350
Arg Ile Glu Thr Pro Lys Phe Gln Ser Lys Gln Gln Pro Gln Asp Asn
      355      360      365
Phe Lys Asn Asn Val Lys Lys Ser Gln Leu Pro Val Gln Leu Asp Leu
      370      375      380
Gly Gly Met Leu Thr Ala Leu Glu Lys Lys Gln His Ser Gln His Ala
  385      390      395      400
Lys Gln Ser Ser Lys Pro Val Val Val Ser Val Gly Ala Val Pro Val
      405      410      415
Leu Ser Lys Glu Cys Ala
      420

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&lt;210&gt; 3731

&lt;211&gt; 1704

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3731

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120  
tgtgcagtgc tgctcccagc atcactgttc gtcaatagtc acccaggaat agaccggcct  
180  
ggcatgctct gcagtttccg gatccctggg gcctgggcct gtgcctggtc cctgaatatc  
240  
caagcaaata actgcttcag tacaggcttg tctcggcggg tcctgttgac caacgtggtg  
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360  
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420  
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480  
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600  
tacgcctacc tgcccctgca tgtgcacgag gaagaaggaa tcctgggtggc agtggggcag  
660  
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720  
ccgtaccctg cctccaaggc cgacattccc agtgtggcct tctcgtcgcg gctggggggc  
780  
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840  
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900  
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960  
cctctggctg ctaggagaga agtgctgaat gttccgtgtg gagatgctca ggaaagtatt  
1020  
ttgagttaaa ttgctggctg agagagcttg gaagtccttt tcataaaagg tacctctttc  
1080  
cttttcttat tgaattctta gaacttagtt aaccctccct gccttttctt aacaaaaagg  
1140  
acttttctaa ggactgaaga ttggcaaaaa cgaaaagctt ctctctcaa gagccattg  
1200  
aagaagccca gtgatgagac ggtgagatgg tttgagtcct cggtgctgg gtagcaggaa  
1260  
gaaagacctg catcctgcat ctgtacttgg ggaagccagc ggagaggacg gggagggtac  
1320  
ttctctaagt ttctgcagaa atattgaagg ctggagtttg gaatccttaa acttggcctt  
1380  
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1440  
aagatggatc ttcttacatg ctagaagttt taaacgggcc ttaacatgcc tttgttcaag  
1500  
caccttccag aatgtaaggc tcagcagctc tggtttctat tacggtgact tgaatgtcag  
1560

attcaagggc ccggcgtcaa aggaattgg ttttgacttt ttgtaatcta ggagcgacag  
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 1680  
 agaagaaaaa aaaaaaaaaa aaaa  
 1704

<210> 3732  
 <211> 281  
 <212> PRT  
 <213> Homo sapiens

<400> 3732  
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 Cys Trp Ala Ser Leu Asn Gln Leu Asp Ser His Val Leu Leu Cys Phe  
 20 25 30  
 Glu Gly Ile Thr Asp Ala Ser Ser Cys Ala Val Leu Leu Pro Ala Ser  
 35 40 45  
 Leu Phe Val Asn Ser His Pro Gly Ile Asp Arg Pro Gly Met Leu Cys  
 50 55 60  
 Ser Phe Arg Ile Pro Gly Ala Trp Ser Cys Ala Trp Ser Leu Asn Ile  
 65 70 75 80  
 Gln Ala Asn Asn Cys Phe Ser Thr Gly Leu Ser Arg Arg Val Leu Leu  
 85 90 95  
 Thr Asn Val Val Thr Gly His Arg Gln Ser Phe Gly Thr Asn Ser Asp  
 100 105 110  
 Val Leu Ala Gln Gln Phe Ala Leu Met Ala Pro Leu Leu Phe Asn Gly  
 115 120 125  
 Cys Arg Ser Gly Glu Ile Phe Ala Ile Asp Leu Arg Cys Gly Asn Gln  
 130 135 140  
 Gly Lys Gly Trp Lys Ala Thr Arg Leu Phe His Asp Ser Ala Val Thr  
 145 150 155 160  
 Ser Val Arg Ile Leu Gln Asp Glu Gln Tyr Leu Met Ala Ser Asp Met  
 165 170 175  
 Ala Gly Lys Ile Lys Leu Trp Asp Leu Arg Thr Thr Lys Cys Val Arg  
 180 185 190  
 Gln Tyr Glu Gly His Val Asn Glu Tyr Ala Tyr Leu Pro Leu His Val  
 195 200 205  
 His Glu Glu Glu Gly Ile Leu Val Ala Val Gly Gln Asp Cys Tyr Thr  
 210 215 220  
 Arg Ile Trp Ser Leu His Asp Ala Arg Leu Leu Arg Thr Ile Pro Ser  
 225 230 235 240  
 Pro Tyr Pro Ala Ser Lys Ala Asp Ile Pro Ser Val Ala Phe Ser Ser  
 245 250 255  
 Arg Leu Gly Gly Ser Arg Gly Ala Pro Gly Leu Leu Met Ala Val Gly  
 260 265 270  
 Gln Asp Leu Tyr Cys Tyr Ser Tyr Ser  
 275 280

<210> 3733  
 <211> 515  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3733

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 180  
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 240  
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 420  
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 515

&lt;210&gt; 3734

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3734

Xaa	Gly	Arg	Ala	Val	Arg	Arg	Val	Thr	Ala	Gly	Thr	Arg	Pro	Gly	Trp
1				5					10					15	
Val	Ser	Gly	Ser	Arg	Tyr	Arg	Arg	Gly	Arg	Arg	Arg	Gly	Arg	Leu	Lys
			20					25						30	
Gly	Lys	Asp	Pro	Gly	Ser	Ala	Pro	Ser	Ser	Val	Arg	Glu	Arg	Glu	Thr
		35					40					45			
Pro	Gly	Ala	Xaa	Pro	Cys	Leu	Pro	Arg	Arg	Gly	Trp	Cys	Val	Pro	Gly
	50					55					60				
Asp	Val	Arg	Ser	Ser	Pro	Pro	Leu	Pro	Gly	Trp	Cys	Ala	Leu	Ser	Asp
65					70					75				80	
Val	Arg	Ser	Arg	Gly	Arg	Ser	Cys	Pro	Ser	Ala	Pro	Lys	Ala	Ala	Gly
				85						90				95	
Gly	Leu	Arg	Ala	Trp	Gly	Arg	Gly	Ser	Gly	Ala	Ala	Arg	Ala	Pro	Ala
			100					105						110	
Pro	Ala	Pro	Ser	Pro	Ser	Ser	Gly	Xaa	Ser	Pro	Ser	Ser	Arg	Thr	Pro
		115					120					125			
Arg	Asp	Trp	Ser	Ala	Ser	Arg	Cys	Trp	Thr	Trp	Ser	Gly	Ala	Ala	Thr
	130					135						140			
Ala	Pro	Thr	Pro	Phe	Ser	Pro	Ala	Gln	Gln	Pro	Pro	Ser	Ser	His	Asp
145					150					155					160
Gly	Leu	Ser	Leu	Asp	Pro	Ser	Gln	Leu	Glu	Pro					
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&lt;210&gt; 3735

&lt;211&gt; 2512

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 3735

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180  
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240  
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300  
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360  
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480  
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540  
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660  
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720  
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780  
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840  
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900  
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1140  
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1260  
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1320  
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1380  
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1560

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 1800  
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 1860  
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 1920  
 aagctgacct gattcaagca gaccgggtga ttgaggagga agaggtggtg agggcccagg  
 1980  
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 2100  
 agaccagcg caaccagaa aaagaaaatg aaaaaagag tgaaggatga gcttcgcaaa  
 2160  
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 2280  
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 2340  
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 2400  
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 2512

&lt;210&gt; 3736

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3736

Thr	Ile	Val	Ala	Leu	Gly	Gln	Gln	Leu	Asp	Arg	Ser	Lys	Pro	Gln	Glu
1				5				10						15	
Ser	Gly	Arg	Pro	Ser	Ala	Thr	Gln	Lys	Lys	Met	Lys	Lys	Arg	Val	
			20					25					30		
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
			35				40					45			
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
			50			55					60				
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70				75					80	
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
				85				90						95	
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100				105					110			
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

	115		120		125										
Lys	Val	Glu	Pro	Arg	Ile	Val	Ile	Val	Glu	Glu	Ala	Ala	Glu	Val	Leu
	130				135						140				
Glu	Ala	His	Thr	Ile	Ala	Thr	Leu	Ser	Lys	Ala					
145					150					155					

<210> 3737  
 <211> 1046  
 <212> DNA  
 <213> Homo sapiens

<400> 3737  
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 120  
 atccctgctg ccagccagcg catcttctctg cacggcaacc gcattctcgca tgtgccagct  
 180  
 gccagcttcc gtgcctgcgg caacctcacc atcctgtggc tgcactcgaa tgtgctggcc  
 240  
 cgaattgatg cggctgcctt cactggcctg gccctcctgg gagcactgga cctcagcgat  
 300  
 aatgcacagc tccggtctgt ggacctgcc acattccacg gcctggggccg cctacacacg  
 360  
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 420  
 gccctgcagt acctctacct gcaggacaac gcgctgcagg cactgcctga tgacaccttc  
 480  
 cgcgacctgg gcaacctcac acacctcttc ctgcacggca accgcatctc cagcgtgccc  
 540  
 gagcgcgcct tccgtgggct gcacagcctc gaccgtctcc tactgcacca gaaccgcgtg  
 600  
 gcccatgtgc acccgcctgc cttccgtgac cttggccgcc tcatgacact ctatctgttt  
 660  
 gccacaatc tatcagcgct gccactgag gccctggccc ccctgcgtgc cctgcagtac  
 720  
 ctgaggctca acgacaacct ctgggtgtgt gactgccggg cagcccact ctgggcctgg  
 780  
 ctgcagaagt tccgcggctc ctctccgag gtgccctgca gcctcccga acgcctggct  
 840  
 ggccgtgacc tcaaacgcct agctgccaat gacctgcagg gctgcgctgt ggccaccggc  
 900  
 ccttaccatc ccatctggac cggcagggcc accgatgagg agccgctggg gcttcccaag  
 960  
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 1020  
 gcaggcaatg cgctgaaggg acgcgt  
 1046

<210> 3738  
 <211> 348  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 3738

Xaa Ala Val Ala Ala Gly Trp Gln Val Ala Ala Pro Cys Pro Gly Ala  
 1 5 10 15  
 Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln  
 20 25 30  
 Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile  
 35 40 45  
 Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg  
 50 55 60  
 Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala  
 65 70 75 80  
 Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu  
 85 90 95  
 Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe  
 100 105 110  
 His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu  
 115 120 125  
 Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr  
 130 135 140  
 Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe  
 145 150 155 160  
 Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile  
 165 170 175  
 Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg  
 180 185 190  
 Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe  
 195 200 205  
 Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu  
 210 215 220  
 Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr  
 225 230 235 240  
 Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro  
 245 250 255  
 Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro  
 260 265 270  
 Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala  
 275 280 285  
 Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro  
 290 295 300  
 Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys  
 305 310 315 320  
 Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly  
 325 330 335  
 Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg  
 340 345

&lt;210&gt; 3739

&lt;211&gt; 1252

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3739

tcataccttat cttcgtcatt ttctgggctg agcttttttg acaaggtgct gtgccagtct  
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acacccctca gccagctgtt cttggaggtc ctgcccctgg gacttgtecg gctcatccag  
 120  
 agtgaggagg gcctggagat gctcattcaa tgagcgggag gcacctctcc ctccccgtaa  
 180  
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 240  
 tatttcttct gtccggttggc caggaagccg gccagttgag ttagaaaaca tctctctttg  
 300  
 aggtttctga actgctgttt gttctctgcc aactgggggc gcaatttctc gttgatttct  
 360  
 agaatgttca tctctgcctt ctcgctggac aaagggcccg ctgataccac catgctgacg  
 420  
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 480  
 cagcacttta ggatccttca ccacaaaaac aaggttcgag gtgcctcaac tcagagctga  
 540  
 aagcactgcc agtagctcag actctgataa gagtggagga gattgtggcc agcgtgccag  
 600  
 gtaaccgtct tgatccatag gctcacattt gatcccaact ggcggtgct tcttggcatt  
 660  
 aactttggat tcccaaccag taaatcttag caagatctga gtttctccag gtatgatatt  
 720  
 attttgttg accatcctta tcttcaaggg ctgttggatc tggcagctct tgatgtcagc  
 780  
 ccacaccatg tgaggctgct cttggtgcac cgaatgggga agtttctaca tcagggcctc  
 840  
 ggagaatcca ctggaagccc tggacagtgg gagtgcagcg caccgccagt gtggaggcca  
 900  
 agagcacaca gcactgaagc tccaggacac cctcaggagg acggcaaggg acaattggct  
 960  
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 1020  
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 gcgcgcgcgc gcctcggccc agctcctggc gccgcagatc gcccgctccg cgttcccaaa  
 1140  
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 1200  
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 1252

&lt;210&gt; 3740

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3740

Met Gly Lys Phe Leu His Gln Gly Leu Gly Glu Ser Thr Gly Ser Pro  
 1 5 10 15  
 Gly Gln Trp Glu Ser Ala Ala Pro Pro Val Trp Arg Pro Arg Ala His  
 20 25 30  
 Ser Thr Glu Ala Pro Gly His Pro Gln Glu Asp Gly Lys Gly Gln Leu  
 35 40 45  
 Ala Gly Glu Ser Pro Gly His Arg Glu Pro Ser Pro Gly Ser Lys Gln

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      50              55              60
Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65              70              75              80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85              90              95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100              105              110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
      115              120              125
Ile Ser Pro Leu Ser Gln Pro Pro Pro Ser Pro
      130              135

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<210> 3741  
 <211> 562  
 <212> DNA  
 <213> Homo sapiens

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<400> 3741
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gtcgtgtcca ctgtggggat ccacgtcctg actaaccttg tgttcctaga aatccctcac
120
cggcagatcg gtgcctcctg aatcccaccc aaaattccca ctgggaatgt gttcctgaaa
180
gagctgcccc ggcttgagaa agcctctttt cagaccaaac ttcgtattca aagctcaaaa
240
agaactgcac acaattagga cagtcataca agatgctgcc cctaactctg ccacaatctg
300
cgagaaggga ggcggggcctt ccgagggcaa agtgcccctg ggaagggatc cgcagggaaac
360
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420
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540
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562

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<210> 3742  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

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<400> 3742
Met Gly Trp Arg Asn Cys Phe Arg Leu Ala Pro Cys Cys Trp Lys Arg
1              5              10              15
Ala Glu Ala Ala Glu Met Asn Pro Val Cys Glu Arg Arg Ala Leu Ser
      20              25              30
Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35              40              45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50              55              60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

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65              70              75              80
Tyr Asp Cys Pro Asn Cys Val Gln Phe Phe Leu Ser Phe Glu Tyr Glu
              85              90              95
Val Trp Ser Glu Lys Arg Leu Ser Gln Ala Trp Ala Ala Leu Ser Gly
              100              105              110
Thr His Ser Gln Trp Glu Phe Trp Val Gly Phe Arg Arg His Arg Ser
              115              120              125
Ala Gly Glu Gly Phe Leu Gly Thr Gln Gly
              130              135

```

&lt;210&gt; 3743

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3743

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nntcatgagc cttcttatac gctccatttt ggcaaggcgc tgacaatggc ggaggctgaa
60
ggcaatgcaa gctgcacagt cagtctaggg ggtgcccaata tggcagagac ccacaaagcc
120
atgatcctgc aactcaatcc cagtgagaac tgcacctgga caatagaaag accagaaaac
180
aaaagcatca gaattatctt ttcctatgtc cagcttgatc cagatggaag ctgtgaaagt
240
gaaaacatta aagtctttga cggaacctcc agcaatgggc ctctgctagg gcaagtctgc
300
agtaaaaacg actatgttcc tgtatttgaa tcatcatcca gtacattgac gtttcaaata
360
gttactgact cagcaagaat tcaaagaact gtctttgtgt tctagtagtt cttatttcct
420
aacatcttta ttccaaagtg tggcgggttac ctggatccct ggaaggat
468

```

&lt;210&gt; 3744

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3744

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Xaa His Glu Pro Ser Tyr Lys Leu His Phe Gly Lys Ala Leu Thr Met
1              5              10              15
Ala Glu Ala Glu Gly Asn Ala Ser Cys Thr Val Ser Leu Gly Gly Ala
              20              25              30
Asn Met Ala Glu Thr His Lys Ala Met Ile Leu Gln Leu Asn Pro Ser
              35              40              45
Glu Asn Cys Thr Trp Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg
              50              55              60
Ile Ile Phe Ser Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser
65              70              75              80
Glu Asn Ile Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu
              85              90              95
Gly Gln Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser
              100              105              110
Ser Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln

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115  
Arg Thr Val Phe Val Phe  
130

120

125

<210> 3745  
<211> 345  
<212> DNA  
<213> Homo sapiens

<400> 3745  
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60  
gacgctgtgg gagaggaaaa cagccacatg tgggctggct gcttggagga gacacatgag  
120  
ccgtgaacac gtctcccccg gccgctccct ggttccatgc gtgctcgtct tgggcaccac  
180  
gagaacacag ccatgcagcc cccgatcctg cagccacagc cacggcatcg cctggtcgga  
240  
tgcagcatct gctccggacg cctctcgctg tcggtgccag gcctgccagg ccaagccccc  
300  
attctcaggg gcggcaggag gtgggaggca cgtttgggag gatcc  
345

<210> 3746  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 3746  
Met Ala Gly Trp Cys Val Tyr Gly Thr Leu Trp Glu Arg Lys Thr Ala  
1 5 10 15  
Thr Cys Gly Leu Ala Ala Trp Arg Arg His Met Ser Arg Glu His Val  
20 25 30  
Ser Pro Gly Arg Ser Leu Val Pro Cys Val Leu Val Leu Gly Thr Thr  
35 40 45  
Arg Thr Gln Pro Cys Ser Pro Arg Ser Cys Ser His Ser His Gly Ile  
50 55 60  
Ala Trp Ser Asp Ala Ala Ser Ala Pro Asp Ala Ser Arg Cys Arg Cys  
65 70 75 80  
Gln Ala Cys Gln Ala Lys Pro Arg Phe Ser Gly Ala Ala Gly Gly Gly  
85 90 95  
Arg His Val Trp Ala Asp  
100

<210> 3747  
<211> 800  
<212> DNA  
<213> Homo sapiens

<400> 3747  
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cgcgccggac cctgggatgc tcttcggccg catcccgtg cgctacgcca tactggtgag  
120



aagggggcgc gcccgccac tttctgctg agccccgcac cctctctggt ggtctctct  
180  
ggggcgcccc tgccaatccc cgcttcccc tcccgagat gcagatgcgc ttcgatggac  
240  
gcctgggctt ccccgccga ttcgtggaca cgcaggacag aagcctagag gacgggctga  
300  
accgcgagct gcgcgaggag ctgggcgaag cggtgcgcg tttccgcgtg gagcgactg  
360  
actaccgcag ctcccacgtc ggggtcaggg ccacgcgttg tggccactt ctatgccaa  
420  
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&lt;210&gt; 3748

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3748

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Glu	Glu	Leu	Gly	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp
			35				40						45		
Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
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Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
				85					90					95	
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
			100					105					110		
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
			115				120					125			
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&lt;210&gt; 3749

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ser Thr Ser Lys Gln Met Pro Pro Ser Asp Ala Glu Gly Asp Pro Leu  
 50 55 60  
 Met Asn Met Leu Met Arg Leu Gln Glu Ala Ala Asn Tyr Ser Ser Pro  
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 Leu Asp Ser Ser Leu Glu Ser Thr Leu  
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 <212> DNA  
 <213> Homo sapiens

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<210> 3752

<211> 66

<212> PRT

<213> Homo sapiens

<400> 3752

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Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro
			20				25						30		
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Thr	Gln	Gly	Gln	Ser	Pro	Glu	Pro
		35				40					45				
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<210> 3753

<211> 1426

<212> DNA

<213> Homo sapiens

<400> 3753

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<210> 3754

<211> 261

<212> PRT

<213> Homo sapiens

<400> 3754

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			20					25					30		
Met	Asp	Cys	Arg	Val	His	Met	Arg	Pro	Ile	Gly	Leu	Thr	Trp	Val	Leu
		35					40				45				
Gln	Leu	Thr	Leu	Ala	Trp	Ile	Leu	Leu	Glu	Ala	Cys	Gly	Gly	Ser	Arg
	50					55				60					
Pro	Leu	Gln	Ala	Arg	Ser	Gln	Gln	His	His	Gly	Leu	Ala	Ala	Asp	Leu
65				70						75				80	
Gly	Lys	Gly	Lys	Leu	His	Leu	Ala	Gly	Pro	Cys	Cys	Pro	Ser	Glu	Met

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Asp	Thr	Thr	Glu	Thr	Ser	Gly	Pro	Gly	Asn	His	Pro	Glu	Arg	Cys	Gly
100								105				110			
Val	Pro	Ser	Pro	Glu	Cys	Glu	Ser	Phe	Leu	Glu	His	Leu	Gln	Arg	Ala
115								120				125			
Leu	Arg	Ser	Arg	Phe	Arg	Leu	Arg	Leu	Leu	Gly	Val	Arg	Gln	Ala	Gln
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Pro	Leu	Cys	Glu	Glu	Leu	Cys	Gln	Ala	Trp	Phe	Ala	Asn	Cys	Glu	Asp
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Asp	Ile	Thr	Cys	Gly	Pro	Thr	Trp	Leu	Pro	Leu	Ser	Glu	Lys	Arg	Gly
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Cys	Glu	Pro	Ser	Cys	Leu	Thr	Tyr	Gly	Gln	Thr	Phe	Ala	Asp	Gly	Thr
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Gly	Ala	Arg	His	Cys	Phe	Asn	Ile	Ser	Ile	Ser	Ala	Val	Pro	Arg	Pro
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Arg	Pro	Gly	Arg	Arg	Gly	Arg	Glu	Ala	Pro	Ser	Arg	Arg	Ser	Arg	Ser
225								230				235			
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<210> 3755

<211> 3149

<212> DNA

<213> Homo sapiens

<400> 3755

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&lt;210&gt; 3756

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3756

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Asp	Asp	Asp	Ser	Ala	Pro	Ser	Thr	Ser	Asn	Ser	Gln	Ser	Asp	Leu	Phe
			20					25					30		
Ser	Glu	Glu	Thr	Thr	Ser	Asp	Asn	Asn	Asn	Thr	Ser	Ile	Thr	Thr	Pro
			35				40					45			
Thr	Leu	Ser	Pro	Ser	Gln	Gln	Pro	Leu	Pro	Thr	Glu	Leu	Asn	Val	Thr
			50			55					60				
Ser	Pro	Ser	Lys	Glu	Glu	Cys	Gly	Pro	Cys	Thr	Asp	Thr	Ala	His	Val
65					70				75					80	
Ser	Leu	Ile	Thr	Pro	Thr	Lys	Arg	Ser	Cys	Gly	Thr	Asp	Ser	Gln	Ser
				85					90					95	
Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu	Asn	Thr
			100					105					110		
Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg	Arg	Arg
			115				120					125			
Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Glu	Leu	Gly	
			130			135				140					
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Arg Ile Gly Glu Gly Cys Ser						
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&lt;210&gt; 3757

&lt;211&gt; 1046

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3757

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&lt;210&gt; 3758

&lt;211&gt; 199

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 3758

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 Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu  
 65 70 75 80  
 Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met  
 85 90 95  
 Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu  
 100 105 110  
 Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val  
 115 120 125  
 Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn  
 130 135 140  
 Met Pro Ser Thr Pro Ser Pro Gln Asp Met Pro Val Leu Phe Pro Ala  
 145 150 155 160  
 Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly  
 165 170 175  
 Asp Pro Gly Leu Cys Gly Leu Val Val Val Ala Leu Ala Glu Ile Phe  
 180 185 190  
 Phe Arg Asp Gly Lys Ser Phe  
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&lt;210&gt; 3759

&lt;211&gt; 830

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3759

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<212> PRT
<213> Homo sapiens
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Cys Asp  Arg Glu Leu Tyr Pro  Gly Glu Pro Arg  Leu His Leu Ser Ala
      35                40                45
Pro Gly  Pro Ala Ser His  Gln Asp Gln Pro Glu Trp  Gln Glu Asp Met
      50                55                60
Gly Arg  Thr Gly Gly Gly Gly Cys Gly His  Pro Ser  Phe Asn Gln Met
65                70                75                80
Leu Asp  Val Lys Gly Pro Ile Pro Val  Lys Arg Gly Gly Gln Ala Leu
      85                90                95
Phe Val  Leu Leu
      100

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<210> 3761
<211> 458
<212> DNA
<213> Homo sapiens
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aaggggagggc gcccgggccgc agcgggaggt ggcccccccg gacaccccgg cgccccgagg
180
cgaggcaccc ccgaaccccg atccctgctg gcaggaccag aggtgtgagg gtggggggcgg
240
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458
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 <212> PRT  
 <213> Homo sapiens

<400> 3762  
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<210> 3763  
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 <212> DNA  
 <213> Homo sapiens

<400> 3763  
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<210> 3764

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3764

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Ser	Pro	Arg	Cys	Ala	Ala	Thr	Met	Ala	Ser	Ser	Asp	Glu	Asp	Gly	Thr	35	40	45	
Asn	Gly	Gly	Ala	Ser	Glu	Ala	Gly	Glu	Asp	Arg	Glu	Ala	Pro	Gly	Lys	50	55	60	
Arg	Arg	Arg	Leu	Gly	Phe	Leu	Ala	Thr	Ala	Trp	Leu	Thr	Phe	Tyr	Asp	65	70	75	80
Ile	Ala	Met	Thr	Ala	Gly	Trp	Leu	Val	Leu	Ala	Ile	Ala	Met	Val	Arg	85	90	95	
Phe	Tyr	Met	Glu	Lys	Gly	Thr	His	Arg	Gly	Leu	Tyr	Lys	Ser	Ile	Gln	100	105	110	
Lys	Thr	Leu	Lys	Phe	Phe	Gln	Thr	Phe	Ala	Leu	Leu	Glu	Ile	Val	His	115	120	125	
Cys	Leu	Ile	Gly	Ile	Val	Pro	Thr	Ser	Val	Ile	Val	Thr	Gly	Val	Gln	130	135	140	
Val	Ser	Ser	Arg	Ile	Phe	Met	Val	Trp	Leu	Ile	Thr	His	Ser	Ile	Lys	145	150	155	160
Pro	Ile	Gln	Asn	Glu	Glu	Ser	Val	Val	Leu	Phe	Leu	Val	Ala	Trp	Thr	165	170	175	
Val	Thr	Glu	Ile	Thr	Arg	Tyr	Ser	Phe	Tyr	Thr	Phe	Ser	Leu	Leu	Asp	180	185	190	
His	Leu	Pro	Tyr	Phe	Ile	Lys	Trp	Ala	Arg	Tyr	Asn	Phe	Phe	Ile	Ile	195	200	205	
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Leu	Pro	Tyr	Val	Lys	Lys	Thr	Gly	Met	Phe	Ser	Ile	Arg	Leu	Pro	Asn	225	230	235	240
Lys	Tyr	Asn	Val	Ser	Phe	Asp	Tyr	Tyr	Tyr	Phe	Leu	Leu	Ile	Thr	Met				

				245					250					255	
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			260					265					270		
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<210> 3765
<211> 2764
<212> DNA
<213> Homo sapiens
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2764

&lt;210&gt; 3766

&lt;211&gt; 464

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3766

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 35 40 45  
 Lys Val Lys Lys Met Gly Leu Gly His Glu Gln Gly Phe Gly Ala Pro  
 50 55 60  
 Cys Leu Lys Cys Lys Glu Lys Cys Glu Gly Phe Glu Leu His Phe Trp  
 65 70 75 80  
 Arg Lys Ile Cys Arg Asn Cys Lys Cys Gly Gln Glu Glu His Asp Val  
 85 90 95  
 Leu Leu Ser Asn Glu Glu Asp Arg Lys Val Gly Lys Leu Phe Glu Asp  
 100 105 110  
 Thr Lys Tyr Thr Thr Leu Ile Ala Lys Leu Lys Ser Asp Gly Ile Pro  
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 130 135 140  
 Lys Asn Val Ser Ile Asn Thr Val Thr Tyr Glu Trp Ala Pro Pro Val  
 145 150 155 160  
 Gln Asn Gln Ala Leu Ala Arg Gln Tyr Met Gln Met Leu Pro Lys Glu  
 165 170 175  
 Lys Gln Pro Val Ala Gly Ser Glu Gly Ala Gln Tyr Arg Lys Lys Gln  
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 Leu Ala Lys Gln Leu Pro Ala His Asp Gln Asp Pro Ser Lys Cys His  
 195 200 205  
 Glu Leu Ser Pro Arg Glu Val Lys Glu Met Glu Gln Phe Val Lys Lys  
 210 215 220  
 Tyr Lys Ser Glu Ala Leu Gly Val Gly Asp Val Lys Leu Pro Cys Glu  
 225 230 235 240  
 Met Asp Ala Gln Gly Pro Lys Gln Met Asn Ile Pro Gly Gly Asp Arg  
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 Ser Thr Pro Ala Ala Val Gly Ala Met Glu Asp Lys Ser Ala Glu His  
 260 265 270  
 Lys Arg Thr Gln Tyr Ser Cys Tyr Cys Cys Lys Leu Ser Met Lys Glu  
 275 280 285  
 Gly Asp Pro Ala Ile Tyr Ala Glu Arg Ala Gly Tyr Asp Lys Leu Trp  
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 His Pro Ala Cys Phe Val Cys Ser Thr Cys His Glu Leu Leu Val Asp  
 305 310 315 320  
 Met Ile Tyr Phe Trp Lys Asn Glu Lys Leu Tyr Cys Gly Arg His Tyr  
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 Cys Asp Ser Glu Lys Pro Arg Cys Ala Gly Cys Asp Glu Leu Ile Phe  
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 Ser Asn Glu Tyr Thr Gln Ala Glu Asn Gln Asn Trp His Leu Lys His  
 355 360 365  
 Phe Cys Cys Phe Asp Cys Asp Ser Ile Leu Ala Gly Glu Ile Tyr Val  
 370 375 380  
 Met Val Asn Asp Lys Pro Val Cys Lys Pro Cys Tyr Val Lys Asn His

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Val	Glu	Gly	Met	Val	Phe	Cys	Ser	Val	Glu	Cys	Lys	Lys	Arg	Met	Ser
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&lt;210&gt; 3767

&lt;211&gt; 2439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3767

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&lt;210&gt; 3768

&lt;211&gt; 379

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3768

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<210> 3769
<211> 1931
<212> DNA
<213> Homo sapiens
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<211> 447

<212> PRT

<213> Homo sapiens

<400> 3770

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&lt;211&gt; 1514

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3771

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<211> 280

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<213> Homo sapiens

<400> 3772

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<211> 678

<212> PRT

<213> Homo sapiens

<400> 3774

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Glu	Arg	Gly	Ala	Ala	Ala	Thr	Pro	Gly	Gly	Leu	Pro	Ala	Pro	Cys	Ala
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His	Pro	Val	Phe	Ser	Lys	Val	Phe	Thr	Val	Asp	Tyr	Tyr	Phe	Glu	Glu
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Val	Gln	Arg	Leu	Arg	Phe	Glu	Val	Tyr	Asp	Thr	His	Gly	Pro	Ser	Gly
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Arg	Tyr	Asp	Asp	Leu	Cys	Leu	Pro	Trp	Ala	Thr	Ala	Gly	Ala	Val	Arg
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Ser	Ser	Gly	Lys	His	Asp	Phe	Ile	Gly	Glu	Phe	Thr	Ser	Thr	Phe	Gln

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&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3775

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<211> 183

<212> PRT

<213> Homo sapiens

<400> 3776

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<212> DNA

<213> Homo sapiens

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&lt;210&gt; 3778

&lt;211&gt; 1049

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3778

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 Glu Lys Arg Asn Lys Ile Glu Glu Ala Pro Glu Ala Thr Pro Gln Pro  
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 Ser Glu Pro Ser Glu Asp Glu Glu Ser Gln Gly Leu Pro Thr Met Ala  
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 Arg Arg Asn Asp Asp Ile Ser Glu Leu Glu Asp Leu Ser Glu Leu Glu  
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 Asp Leu Lys Asp Ala Lys Leu Gln Thr Leu Lys Glu Leu Phe Pro Gln  
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 Gly Glu Glu Ser Asn Glu Ser Ala Glu Ser Ser Ser Asn Trp Glu Lys  
 260 265 270  
 Gln Glu Ser Ile Val Leu Lys Leu Gln Lys Glu Phe Pro Asn Phe Asp  
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 Lys Gln Glu Leu Arg Glu Val Leu Lys Glu His Glu Trp Met Tyr Thr  
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      420      425      430
Ala Gln Lys Ile Thr Glu Leu Arg Pro Phe Asn Ser Trp Glu Ala Leu
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Phe Thr Lys Met Ser Lys Thr Asn Gly Leu Ser Glu Asp Leu Ile Trp
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His Cys Lys Thr Leu Ile Gln Glu Arg Asp Val Val Ile Arg Leu Met
465      470      475      480
Asn Lys Cys Glu Asp Ile Ser Asn Lys Leu Thr Lys Gln Val Thr Met
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Leu Thr Gly Asn Gly Gly Gly Trp Asn Ile Glu Gln Pro Ser Ile Leu
      500      505      510
Asn Gln Ser Leu Ser Leu Lys Pro Tyr Gln Lys Val Gly Leu Asn Trp
      515      520      525
Leu Ala Leu Val His Lys His Gly Leu Asn Gly Ile Leu Ala Asp Glu
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Met Gly Leu Gly Lys Thr Ile Gln Ala Ile Ala Phe Leu Ala Tyr Leu
545      550      555      560
Tyr Gln Glu Gly Asn Asn Gly Pro His Leu Ile Val Val Pro Ala Ser
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Thr Ile Asp Asn Trp Leu Arg Glu Val Asn Leu Trp Cys Pro Thr Leu
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Phe Asn Ile His Ser Arg Tyr Glu Asp Tyr Asn Val Ile Val Thr Thr
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Tyr Asn Cys Ala Ile Ser Ser Ser Asp Asp Arg Ser Leu Phe Arg Arg
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Arg Leu Leu Leu Thr Gly Thr Pro Val Gln Asn Asn Leu Leu Glu Leu
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Met Ser Leu Leu Asn Phe Val Met Pro His Met Phe Ser Ser Ser Thr
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Ser Glu Ile Arg Arg Met Phe Ser Ser Lys Thr Lys Ser Ala Asp Glu
705      710      715      720
Gln Ser Ile Tyr Glu Lys Glu Arg Ile Ala His Ala Lys Gln Ile Ile
      725      730      735
Lys Pro Phe Ile Leu Arg Arg Val Lys Glu Glu Val Leu Lys Gln Leu
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Pro Pro Lys Lys Asp Arg Ile Glu Leu Cys Ala Met Ser Glu Arg Gln
      755      760      765
Glu Gln Leu Tyr Leu Gly Leu Phe Asn Arg Leu Lys Lys Ser Ile Asn
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<211> 1853
<212> DNA
<213> Homo sapiens
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<210> 3780

<211> 530

<212> PRT

<213> Homo sapiens

<400> 3780

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Val Val Arg Ser Lys Leu Ser Pro Ser Pro Ser Leu Arg Lys Ser Ser			
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Lys Ser Pro Lys Arg Lys Ser Ser Pro Lys Ser Ser Ser Ala Ser Lys			
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Arg Asn Ser Lys Thr Asn Gln Ser Lys Lys Lys Gly Pro Arg Thr Pro			
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Lys Glu Lys Tyr Lys Val Lys Asp Arg Ile Glu Glu Lys Thr Arg Asp			
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Gly Lys Asp Arg Gly Arg Asp Phe Glu Arg Gln Arg Glu Lys Arg Asp			
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Lys Pro Arg Ser Thr Ser Pro Ala Gly Gln His His Ser Pro Ile Ser			
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&lt;210&gt; 3781

&lt;211&gt; 1364

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3781

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<210> 3782

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3782

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Val	Pro	Trp	Thr	Pro	Arg	Phe	Ala	Tyr	Gly	Val	Phe	Tyr	Ala	Asp	Pro
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Cys	Thr	Gly	Gly	Asp	Ser	Tyr	His	Pro	His	Glu	Gln	Ser	Ser	Pro	Pro
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Ile	Phe	Ser	Lys	Gln	Ser	Trp	Ala	Leu	Thr	Pro	Leu	Glu	Arg	Gly	Arg
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<210> 3783

<211> 4137

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<213> Homo sapiens

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acccttagct gatggaaaca atcaatcata ttttaatacg ttagaatcag tttactcca  
3900  
atcagctggc aattttgagc tgccgggtat acaccaaagt gttctgttca gtacctagct  
3960  
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4020  
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4140  
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4200  
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4320  
cagaaaaaaa aaaaaaaaaa a  
4341

<210> 3790  
 <211> 1092  
 <212> PRT  
 <213> Homo sapiens

<400> 3790  
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 20 25 30  
 Leu Gln Val Leu Lys Ala Gln Ser Glu Asp Pro Leu Pro Glu Leu His  
 35 40 45  
 Glu Asp Leu His Asn Glu Lys Glu Leu Ile Lys Glu Leu Glu Gln Ser  
 50 55 60  
 Leu Ala Ser Trp Thr Gln Asn Leu Lys Glu Leu Gln Thr Met Lys Ala  
 65 70 75 80  
 Asp Leu Thr Arg His Val Leu Val Glu Asp Val Met Val Leu Lys Glu  
 85 90 95  
 Gln Ile Glu His Leu His Arg Gln Trp Glu Asp Leu Cys Leu Arg Val  
 100 105 110  
 Ala Ile Arg Lys Gln Glu Ile Glu Asp Arg Leu Asn Thr Trp Val Val  
 115 120 125  
 Phe Asn Glu Lys Asn Lys Glu Leu Cys Ala Trp Leu Val Gln Met Glu  
 130 135 140  
 Asn Lys Val Leu Gln Thr Val Asp Ile Ser Ile Glu Glu Met Ile Glu  
 145 150 155 160  
 Lys Leu Gln Lys Asp Cys Met Glu Glu Ile Asn Leu Phe Ser Glu Asn  
 165 170 175  
 Lys Leu Gln Leu Lys Gln Met Gly Asp Gln Leu Ile Lys Ala Ser Asn  
 180 185 190  
 Lys Ser Arg Ala Ala Glu Ile Asp Asp Lys Leu Asn Lys Ile Asn Asp  
 195 200 205  
 Arg Trp Gln His Leu Phe Asp Val Ile Gly Ser Arg Val Lys Lys Leu  
 210 215 220  
 Lys Glu Thr Phe Ala Phe Ile Gln Gln Leu Asp Lys Asn Met Ser Asn  
 225 230 235 240  
 Leu Arg Thr Trp Leu Ala Arg Ile Glu Ser Glu Leu Ser Lys Pro Val  
 245 250 255  
 Val Tyr Asp Val Cys Asp Asp Gln Glu Ile Gln Lys Arg Leu Ala Glu  
 260 265 270  
 Gln Gln Asp Leu Gln Arg Asp Ile Glu Gln His Ser Ala Gly Val Glu  
 275 280 285  
 Ser Val Phe Asn Ile Cys Asp Val Leu Leu His Asp Ser Asp Ala Cys  
 290 295 300  
 Ala Asn Glu Thr Glu Cys Asp Ser Ile Gln Gln Thr Thr Arg Ser Leu  
 305 310 315 320  
 Asp Arg Arg Trp Arg Asn Ile Cys Ala Met Ser Met Glu Arg Arg Met  
 325 330 335  
 Lys Ile Glu Glu Thr Trp Arg Leu Trp Gln Lys Phe Leu Asp Asp Tyr  
 340 345 350  
 Ser Arg Phe Glu Asp Trp Leu Lys Ser Ala Glu Arg Thr Ala Ala Cys  
 355 360 365  
 Pro Asn Ser Ser Glu Val Leu Tyr Thr Ser Ala Lys Glu Glu Leu Lys



370	375	380
Arg Phe Glu Ala Phe	Gln Arg Gln Ile His	Glu Arg Leu Thr Gln Leu
385	390	395
Glu Leu Ile Asn Lys	Gln Tyr Arg Arg Leu Ala Arg	Glu Asn Arg Thr
405	410	415
Asp Thr Ala Ser Arg	Leu Lys Gln Met Val His	Glu Gly Asn Gln Arg
420	425	430
Trp Asp Asn Leu Gln	Arg Arg Val Thr Ala Val	Leu Arg Arg Leu Arg
435	440	445
His Phe Thr Asn Gln	Arg Glu Glu Phe Glu Gly	Thr Arg Glu Ser Ile
450	455	460
Leu Val Trp Leu Thr	Glu Met Asp Leu Gln Leu Thr	Asn Val Glu His
465	470	475
Phe Ser Glu Ser Asp	Ala Asp Asp Lys Met Arg	Gln Leu Asn Gly Phe
485	490	495
Gln Gln Glu Ile Thr	Leu Asn Thr Asn Lys Ile	Asp Gln Leu Ile Val
500	505	510
Phe Gly Glu Gln Leu	Ile Gln Lys Ser Glu Pro	Leu Asp Ala Val Leu
515	520	525
Ile Glu Asp Glu Leu	Glu Glu Leu His Arg Tyr	Cys Gln Glu Val Phe
530	535	540
Gly Arg Val Ser Arg	Phe His Arg Arg Leu Thr	Ser Cys Thr Pro Gly
545	550	555
Leu Glu Asp Glu Lys	Glu Ala Ser Glu Asn Glu Thr	Asp Met Glu Asp
565	570	575
Pro Arg Glu Ile Gln	Thr Asp Ser Trp Arg Lys	Arg Gly Glu Ser Glu
580	585	590
Glu Pro Ser Ser Pro	Gln Ser Leu Cys His Leu	Val Ala Pro Gly His
595	600	605
Glu Arg Ser Gly Cys	Glu Thr Pro Val Ser Val	Asp Ser Ile Pro Leu
610	615	620
Glu Trp Asp His Thr	Gly Asp Val Gly Gly Ser	Ser Ser His Glu Glu
625	630	635
Asp Glu Glu Gly Pro	Tyr Tyr Ser Ala Leu Ser	Gly Lys Ser Ile Ser
645	650	655
Asp Gly His Ser Trp	His Val Pro Asp Ser Pro	Ser Cys Pro Glu His
660	665	670
His Tyr Lys Gln Met	Glu Gly Asp Arg Asn Val	Pro Pro Val Pro Pro
675	680	685
Ala Ser Ser Thr Pro	Tyr Lys Pro Pro Tyr Gly	Lys Leu Leu Leu Pro
690	695	700
Pro Gly Thr Asp Gly	Gly Lys Glu Gly Pro Arg	Val Leu Asn Gly Asn
705	710	715
Pro Gln Gln Glu Asp	Gly Gly Leu Ala Gly Ile	Thr Glu Gln Gln Ser
725	730	735
Gly Ala Phe Asp Arg	Trp Glu Met Ile Gln Ala	Gln Glu Leu His Asn
740	745	750
Lys Leu Lys Ile Lys	Gln Asn Leu Gln Gln Leu	Asn Ser Asp Ile Ser
755	760	765
Ala Ile Thr Thr Trp	Leu Lys Lys Thr Glu Ala	Glu Leu Glu Met Leu
770	775	780
Lys Met Ala Lys Pro	Pro Ser Asp Ile Gln Glu	Ile Glu Leu Arg Val
785	790	795
Lys Arg Leu Gln Glu	Ile Leu Lys Ala Phe Asp	Thr Tyr Lys Ala Leu

805										810					815				
Val	Val	Ser	Val	Asn	Val	Ser	Ser	Lys	Glu	Phe	Leu	Gln	Thr	Glu	Ser				
820				825				830											
Pro	Glu	Ser	Thr	Glu	Leu	Gln	Ser	Arg	Leu	Arg	Gln	Leu	Ser	Leu	Leu				
835				840				845											
Trp	Glu	Ala	Ala	Gln	Gly	Ala	Val	Asp	Ser	Trp	Arg	Gly	Gly	Leu	Arg				
850				855				860											
Gln	Ser	Leu	Met	Gln	Cys	Gln	Asp	Phe	His	Gln	Leu	Ser	Gln	Asn	Leu				
865				870				875				880							
Leu	Leu	Trp	Leu	Ala	Ser	Ala	Lys	Asn	Arg	Arg	Gln	Lys	Ala	His	Val				
885				890				895											
Thr	Asp	Pro	Lys	Ala	Asp	Pro	Arg	Ala	Leu	Leu	Glu	Cys	Arg	Arg	Glu				
900				905				910											
Leu	Met	Gln	Leu	Glu	Lys	Glu	Leu	Val	Glu	Arg	Gln	Pro	Gln	Val	Asp				
915				920				925											
Met	Leu	Gln	Glu	Ile	Ser	Asn	Ser	Leu	Leu	Ile	Lys	Gly	His	Gly	Glu				
930				935				940											
Asp	Cys	Ile	Glu	Ala	Glu	Glu	Lys	Val	His	Val	Ile	Glu	Lys	Lys	Leu				
945				950				955				960							
Lys	Gln	Leu	Arg	Glu	Gln	Val	Ser	Gln	Asp	Leu	Met	Ala	Leu	Gln	Gly				
965				970				975											
Thr	Gln	Asn	Pro	Ala	Ser	Pro	Leu	Pro	Ser	Phe	Asp	Glu	Val	Asp	Ser				
980				985				990											
Gly	Asp	Gln	Pro	Pro	Ala	Thr	Ser	Val	Pro	Ala	Pro	Arg	Ala	Lys	Gln				
995				1000				1005											
Phe	Arg	Ala	Val	Arg	Thr	Thr	Glu	Gly	Glu	Glu	Glu	Thr	Glu	Ser	Arg				
1010				1015				1020											
Val	Pro	Gly	Ser	Thr	Arg	Pro	Gln	Arg	Ser	Phe	Leu	Ser	Arg	Val	Val				
1025				1030				1035				1040							
Arg	Ala	Ala	Leu	Pro	Leu	Gln	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu				
1045				1050				1055											
Ala	Cys	Leu	Leu	Pro	Ser	Ser	Glu	Glu	Asp	Tyr	Ser	Cys	Thr	Gln	Ala				
1060				1065				1070											
Asn	Asn	Phe	Ala	Arg	Ser	Phe	Tyr	Pro	Met	Leu	Arg	Tyr	Thr	Asn	Gly				
1075				1080				1085											
Pro	Pro	Pro	Thr																
1090																			

<210> 3791

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 3791

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ctggcaacat agtatctgtg aaagtgtgga gctcatcttg ttccaacggg tcagcatccc  
120

tgaaccttct ttaaacattt agcctcttcc tctctctgct tttcccgagc tttccgttcc  
180

tcttcctcct tccggcaagc aacttcctca ggtgactctg ccctttgatc cattggaata  
240

tctgtccca gagacatagc aattgctctc atcatctggt cctcttcaga catgctgaga  
300

tcccgaacaa ctcctcccat gattggagga gggtaggta aaaggtactc tgtggcctgc  
 360  
 tccatgggtgc tgggtgttcaa cagtgcctcc attgcatgtt cccttgtaga gcccattgtcc  
 420  
 atgagctgtt gcagttgttg ctggttgact tgaggttccc ggcgggagcc accttctct  
 480  
 tgccctgtat cctcttctcc tcgagacccc tccttctcct tgcttagtct ctctcgaatc  
 540  
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 600  
 ccatatacct tcaggggttt cgggttccat aagtttttga tgcaagtaaa ggctgctttc  
 660  
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 720  
 aatttggcag gcagcgaatg tggagattca agcaccgtgg tgggattcac catcttctcc  
 780  
 accagcataa gccaggcatc taggaattct cctgtgccat caggcaagtc tgagtgttcc  
 840  
 aatccctcag aaacaggaac ttacctccc atggacagag ccagttgaa agtttcaaaa  
 900  
 agagcattgt ggcctccgga gcagagaaat ttttgcagca tgaggtggta gggatacttc  
 960  
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 1011

&lt;210&gt; 3792

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3792

Met	Leu	Phe	Asp	Glu	Arg	Lys	Tyr	Pro	Tyr	His	Leu	Met	Leu	Gln	Lys
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Phe	Leu	Cys	Ser	Gly	Gly	His	Asn	Ala	Leu	Phe	Glu	Thr	Phe	Asn	Trp
			20					25					30		
Ala	Leu	Ser	Met	Gly	Gly	Lys	Val	Pro	Val	Ser	Glu	Gly	Leu	Glu	His
		35				40					45				
Ser	Asp	Leu	Pro	Asp	Gly	Thr	Gly	Glu	Phe	Leu	Asp	Ala	Trp	Leu	Met
	50				55						60				
Leu	Val	Glu	Lys	Met	Val	Asn	Pro	Thr	Thr	Val	Leu	Glu	Ser	Pro	His
65					70					75				80	
Ser	Leu	Pro	Ala	Lys	Leu	Pro	Gly	Gly	Val	Gln	Asn	Phe	Pro	Gln	Phe
			85						90					95	
Ser	Ala	Leu	Arg	Phe	Leu	Val	Val	Thr	Gln	Lys	Ala	Ala	Phe	Thr	Cys
		100						105					110		
Ile	Lys	Asn	Leu	Trp	Asn	Arg	Lys	Pro	Leu	Lys	Val	Tyr	Gly	Gly	Arg
	115				120						125				
Met	Ala	Glu	Ser	Met	Leu	Ala	Ile	Leu	Cys	His	Ile	Leu	Arg	Gly	Glu
	130				135						140				
Pro	Val	Ile	Arg	Glu	Arg	Leu	Ser	Lys	Glu	Lys	Glu	Gly	Ser	Arg	Gly
145				150					155					160	
Glu	Glu	Asp	Thr	Gly	Gln	Glu	Glu	Gly	Gly	Ser	Arg	Arg	Glu	Pro	Gln
			165					170					175		
Val	Asn	Gln	Gln	Gln	Leu	Gln	Gln	Leu	Met	Asp	Met	Gly	Phe	Thr	Arg

180				185				190							
Glu	His	Ala	Met	Glu	Ala	Leu	Leu	Asn	Thr	Ser	Thr	Met	Glu	Gln	Ala
195				200				205							
Thr	Glu	Tyr	Leu	Leu	Thr	His	Pro	Pro	Pro	Ile	Met	Gly	Gly	Val	Val
210				215				220							
Arg	Asp	Leu	Ser	Met	Ser	Glu	Glu	Asp	Gln	Met	Met	Arg	Ala	Ile	Ala
225				230				235				240			
Met	Ser	Leu	Gly	Gln	Asp	Ile	Pro	Met	Asp	Gln	Arg	Ala	Glu	Ser	Pro
245				250				255							
Glu	Glu	Val	Ala	Cys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Lys	Ala	Arg	Glu
260				265				270							
Lys	Gln	Glu	Glu	Glu	Ala	Lys	Cys	Leu	Lys	Lys	Val	Gln	Gly	Cys	
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<210> 3793
<211> 360
<212> DNA
<213> Homo sapiens
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120
tactttgtgc cgggtaggaa caacagtttc tttttttctt ggagacagtg tttcactctt
180
gttgcccagg ctggagggca atgggcgcgat ctcagctcac tgcaacctcc gcctttcggg
240
ctcaagagat tctcctgcct cagcctccca agtagctggg attacaggca tgcataacca
300
tgcaccatgc ccgactaatt ttgtattttt agtagagaca gggtttctcc atgttggtca
360
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<210> 3794
<211> 96
<212> PRT
<213> Homo sapiens
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<400> 3794															
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Cys	Val	Phe	Ile	Phe	Gln	Ile	Thr	Gly	Arg	Phe	Leu	Gly	Leu	Cys	Tyr
			20					25					30		
Phe	Val	Pro	Gly	Arg	Asn	Asn	Ser	Phe	Phe	Phe	Ser	Trp	Arg	Gln	Cys
		35					40					45			
Phe	Thr	Leu	Val	Ala	Gln	Ala	Gly	Gly	Gln	Trp	Arg	Asp	Leu	Ser	Ser
	50					55					60				
Leu	Gln	Pro	Pro	Pro	Phe	Gly	Leu	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu
65					70					75				80	
Pro	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Ser	Pro	Cys	Thr	Met	Pro	Asp
				85					90					95	

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<210> 3795
<211> 1341
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3795

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120  
gagctgcagg cctgtgctga tgtcgtggat cgagaacgct tctgccgctg ggcgggccta  
180  
cctcgacagg gctttcccat catctttcac ggcgtaatgg gcaaagatga gcgtaaggc  
240  
aacagcccat ccttcttcaa ccctgaagag gctgccacag tgacttcta cctgaagctg  
300  
ctcctggccc cctctccaa gaagggcaaa gcccgcctga gccctcgaag tgtgggcgtc  
360  
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420  
gagcttcgag gactggatga catcaaggac ttgaagggtg gttcagtaga agaattcaa  
480  
ggccaagaac gaagcgtcat cctcatctcc accgtgcgaa gcagccagag ctttgtgcag  
540  
ctggatctgg actttaatct gggtttcctt aagaaccca agaggttcaa tgtagctgtg  
600  
acccgggcca aggcctgct catcatcgtg gggaaccccc ttctcctggg ccatgacct  
660  
gactggaaag tattcctgga gttctgtaa gaaaacggag ggtataccgg gtgtcccttc  
720  
cctgccaaac tggacctgca acagggacag aatttactgc aaggctctgag caagctcagc  
780  
ccctctacct cagggcccca cagccatgac tacctcccc aggagcggga ggggaaggg  
840  
ggcctgtctc tgcaagtgga gccagagtgg aggaatgagc tctgaagaca cagcaccag  
900  
ccttctcgca ccagccaagc cttaactgcc tgcccgaccc tgaaccagaa ccagctgaa  
960  
ctgccctcc aaggacagg aaggctggg gagggagttt acaaccaag ccattccacc  
1020  
ccctcccctg ctggggagaa tgacacatca agctgctaac aattggggga aggggaagga  
1080  
agaaaactct gaaaacaaaa tcttgttcta tgcaaaagcc ttgataatgt ctcctctgcc  
1140  
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1200  
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1260  
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1320  
cagaccactc cttcacgg t  
1341

&lt;210&gt; 3796

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3796

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Asn Cys Leu Tyr Lys Lys Gly Pro Asp Gly Tyr Asp Pro Gln Phe Ile
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Thr Lys Leu Leu Arg Asn Tyr Arg Ser His Pro Thr Ile Leu Asp Ile
          20           25           30
Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
          35           40           45
Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
          50           55           60
Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
65           70           75           80
Asn Ser Pro Ser Phe Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
          85           90           95
Tyr Leu Lys Leu Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
          100          105          110
Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
          115          120          125
Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
          130          135          140
Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
145          150          155          160
Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
          165          170          175
Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
          180          185          190
Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
          195          200          205
Ile Val Gly Asn Pro Leu Leu Gly His Asp Pro Asp Trp Lys Val
          210          215          220
Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
225          230          235          240
Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
          245          250          255
Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
          260          265          270
Pro Gln Glu Arg Glu Gly Glu Gly Gly Leu Ser Leu Gln Val Glu Pro
          275          280          285
Glu Trp Arg Asn Glu Leu
          290

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&lt;210&gt; 3797

&lt;211&gt; 1970

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3797

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60
ctccgctggc ggctgccgct cacctgcctg ctctgcagg tgattatggt gattctcttc
120
ggggtgttcg tgcgctacga cttcgaggcc gacgccact ggtggtcaga gaggacgcac
180

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aagaacttga gcgacatgga gaacgaattc tactatcgct acccaagctt ccaggacgtg  
240  
cacgtgatgg tcttcgtggg cttcggcttc ctcatgactt tcctgcagcg ctacggcttc  
300  
agcgccgtgg gcttcaactt cctgttggca gccttcggca tccagtgggc gctgctcatg  
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420  
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540  
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600  
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720  
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780  
caccgagccg ccatcaacac ctactgctcc ttggcagcct gogtgcttac ctcggtggca  
840  
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900  
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960  
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1020  
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1080  
cctggcatca taggcggcat cgtgggtgct gtgacagcgg cctccgccag ccttgaagtc  
1140  
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1200  
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1260  
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1320  
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1380  
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1440  
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1500  
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1560  
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1620  
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1680  
gcatccaagc cgggttctgg ctgcagaagt tctgcctctg cctggggtct tggccacatt  
1740  
ggagaaaaac aggtctcaaag tggggctggg acctgggtgg tgaacctgag ctctcccagg  
1800

agacaactta gctgccagtc accacctatg aggtcttctt accccgtgcc tgcacctcgg  
 1860  
 ccagcatctc ctatgctccc tgggtccccc agacctctct gtgttggtgtg cgtggcagcc  
 1920  
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 1970

<210> 3798  
 <211> 473  
 <212> PRT  
 <213> Homo sapiens

<400> 3798  
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 1 5 10 15  
 Val Ile Leu Phe Gly Val Phe Val Arg Tyr Asp Phe Glu Ala Asp Ala  
 20 25 30  
 His Trp Trp Ser Glu Arg Thr His Lys Asn Leu Ser Asp Met Glu Asn  
 35 40 45  
 Glu Phe Tyr Tyr Arg Tyr Pro Ser Phe Gln Asp Val His Val Met Val  
 50 55 60  
 Phe Val Gly Phe Gly Phe Leu Met Thr Phe Leu Gln Arg Tyr Gly Phe  
 65 70 75 80  
 Ser Ala Val Gly Phe Asn Phe Leu Leu Ala Ala Phe Gly Ile Gln Trp  
 85 90 95  
 Ala Leu Leu Met Gln Gly Trp Phe His Phe Leu Gln Asp Arg Tyr Ile  
 100 105 110  
 Val Val Gly Val Glu Asn Leu Ile Asn Ala Asp Phe Cys Val Ala Ser  
 115 120 125  
 Val Cys Val Ala Phe Gly Ala Val Leu Gly Lys Val Ser Pro Ile Gln  
 130 135 140  
 Leu Leu Ile Met Thr Phe Phe Gln Val Thr Leu Phe Ala Val Asn Glu  
 145 150 155 160  
 Phe Ile Leu Leu Asn Leu Leu Lys Val Lys Asp Ala Gly Gly Ser Met  
 165 170 175  
 Thr Ile His Thr Phe Gly Ala Tyr Phe Gly Leu Thr Val Thr Arg Ile  
 180 185 190  
 Leu Tyr Arg Arg Asn Leu Glu Gln Ser Lys Glu Arg Gln Asn Ser Val  
 195 200 205  
 Tyr Gln Ser Asp Leu Phe Ala Met Ile Gly Thr Leu Phe Leu Trp Met  
 210 215 220  
 Tyr Trp Pro Ser Phe Asn Ser Ala Ile Ser Tyr His Gly Asp Ser Gln  
 225 230 235 240  
 His Arg Ala Ala Ile Asn Thr Tyr Cys Ser Leu Ala Ala Cys Val Leu  
 245 250 255  
 Thr Ser Val Ala Ile Ser Ser Ala Leu His Lys Lys Gly Lys Leu Asp  
 260 265 270  
 Met Val His Ile Gln Asn Ala Thr Leu Ala Gly Gly Val Ala Val Gly  
 275 280 285  
 Thr Ala Ala Glu Met Met Leu Met Pro Tyr Gly Ala Leu Ile Ile Gly  
 290 295 300  
 Phe Val Cys Gly Ile Ile Ser Thr Leu Gly Phe Val Tyr Leu Thr Pro  
 305 310 315 320  
 Phe Leu Glu Ser Arg Leu His Ile Gln Asp Thr Cys Gly Ile Asn Asn



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          325          330          335
Leu His Gly Ile Pro Gly Ile Ile Gly Gly Ile Val Gly Ala Val Thr
          340          345          350
Ala Ala Ser Ala Ser Leu Glu Val Tyr Gly Lys Glu Gly Leu Val His
          355          360          365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln
          370          375          380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
385          390          395          400
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly
          405          410          415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
          420          425          430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
          435          440          445
Pro Ser Gly Pro Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro
          450          455          460
Met Ala Ser Ser Val Pro Leu Val Pro
465          470

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&lt;210&gt; 3799

&lt;211&gt; 210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3799

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tcgaggaact gctcggcctc cacatcccaa gcctcacctt ctccctgcat cacagagaga
60
agcaagcaga aggcccgagg gagaacaaga tccagctcct cctcctcttc ttccagttct
120
tctagctcct cttcttcttc ctcgtcctcc tcctcttctc ccagtgatgg ccggaagaag
180
cggggggaagt acaaggacaa gaggaggaag
210

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&lt;210&gt; 3800

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3800

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Ser Arg Asn Cys Ser Ala Ser Thr Ser Gln Ala Ser Pro Ser Pro Cys
1          5          10          15
Ile Thr Glu Arg Ser Lys Gln Lys Ala Arg Arg Arg Thr Arg Ser Ser
          20          25          30
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
          35          40          45
Ser Ser Ser Ser Ser Ser Ser Asp Gly Arg Lys Lys Arg Gly Lys Tyr
          50          55          60
Lys Asp Lys Arg Arg Lys
65          70

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&lt;210&gt; 3801

&lt;211&gt; 4070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3801

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60  
gctggggccgc gggcagcgtc gcctcacgcg gagcagagct gagctgaagc gggacccgga  
120  
gcccagagcag ccgcccgcct ggcaatcaaa tttctggaag tcatcaagcc cttctgtgtc  
180  
atcctgcccg aaattcagaa gccagagagg aagattcagt ttaaggagaa agtgctgtgg  
240  
accgctatca ccctctttat cttcttagtg tgctgccaga ttccctgtt tgggatcatg  
300  
tcttcagatt cagctgacct tttctattgg atgagagtga ttctagcctc taacagaggc  
360  
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420  
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600  
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660  
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720  
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780  
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840  
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1380  
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1500

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1980  
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2700  
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&lt;210&gt; 3802

&lt;211&gt; 476

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3802

Met	Ala	Ile	Lys	Phe	Leu	Glu	Val	Ile	Lys	Pro	Phe	Cys	Val	Ile	Leu
1			5						10					15	
Pro	Glu	Ile	Gln	Lys	Pro	Glu	Arg	Lys	Ile	Gln	Phe	Lys	Glu	Lys	Val
			20					25					30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
		35				40						45			
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
		50				55					60				
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
65				70					75					80	
Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
			85					90						95	
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
			100					105						110	
Asn	Gly	Ala	Gln	Lys	Leu	Phe	Gly	Met	Ile	Ile	Thr	Ile	Gly	Gln	Ser

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<210> 3803
<211> 345
<212> DNA
<213> Homo sapiens
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2951

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 180  
 gaagcttatt cacgtatgag tcatgcattg gaagagatta aaaaattcct ggttcctgac  
 240  
 tacaatgatg aaattcgtca ggaacaacta cgtgaattat cttacttaaa tggctcagag  
 300  
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 345

<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

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Met	Ser	Ile	Leu	Gly	Lys	Gly	Ser	Met	Arg	Asp	Lys	Ala	Lys	Glu	Glu
			20				25						30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp	Glu
	35					40					45				
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr	Ser
	50				55					60					
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro	Asp
65				70				75						80	
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr	Leu
			85				90						95		
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Arg	Gly
			100				105						110		
Ile	Arg	Ile													
			115												

<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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 120  
 aagagcccggt tgcctaccag atgccaggcc ctgtgcttcc tcttgctttt gaggttttgg  
 180  
 cttgtgatca accaggaggg aaacatgggt actgctcgcc aggaacctcg cctggctctg  
 240  
 atttccctga cctgcgatgg tgacaccctg actctcagtg cagcctacac aaaggaccta  
 300  
 ctactgccta tcaaaacgcc caccacaaat gcagtgcaca agtgacagagt gcacggcctg  
 360  
 gagatagagg gcagggactg tggcgaggcc gccgccaggt ggataaccag cttcctgaag  
 420

tcacagccct accgcctggt gcacttcgag cctcacatgc gaccgagacg tcctcatcaa  
480  
atagcagact tgttccgacc caaggaccag attgcttact cagacaccag cccattcttg  
540  
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600  
accaacttca ggccaatat tgtaatttca ggatgcgatg tctatgcaga ggattcttgg  
660  
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720  
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840  
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900  
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960  
aaaaatgaca acacttgaag catggtgttt cagaactgag acctctacat tttctttaa  
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1260  
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1320  
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1380  
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1680  
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1800  
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1920  
aaa  
1923

&lt;210&gt; 3806

<211> 280  
 <212> PRT  
 <213> Homo sapiens

<400> 3806  
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 Asp Lys Ser Pro Leu Pro Thr Arg Cys Gln Ala Leu Cys Phe Leu Leu  
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 Pro Leu Arg Phe Trp Leu Val Ile Asn Gln Glu Gly Asn Met Val Thr  
 35 40 45  
 Ala Arg Gln Glu Pro Arg Leu Val Leu Ile Ser Leu Thr Cys Asp Gly  
 50 55 60  
 Asp Thr Leu Thr Leu Ser Ala Ala Tyr Thr Lys Asp Leu Leu Leu Pro  
 65 70 75 80  
 Ile Lys Thr Pro Thr Thr Asn Ala Val His Lys Cys Arg Val His Gly  
 85 90 95  
 Leu Glu Ile Glu Gly Arg Asp Cys Gly Glu Ala Ala Ala Gln Trp Ile  
 100 105 110  
 Thr Ser Phe Leu Lys Ser Gln Pro Tyr Arg Leu Val His Phe Glu Pro  
 115 120 125  
 His Met Arg Pro Arg Arg Pro His Gln Ile Ala Asp Leu Phe Arg Pro  
 130 135 140  
 Lys Asp Gln Ile Ala Tyr Ser Asp Thr Ser Pro Phe Leu Ile Leu Ser  
 145 150 155 160  
 Glu Ala Ser Leu Ala Asp Leu Asn Ser Arg Leu Glu Lys Lys Val Lys  
 165 170 175  
 Ala Thr Asn Phe Arg Pro Asn Ile Val Ile Ser Gly Cys Asp Val Tyr  
 180 185 190  
 Ala Glu Asp Ser Trp Asp Glu Leu Leu Ile Gly Asp Val Glu Leu Lys  
 195 200 205  
 Arg Val Met Ala Cys Ser Arg Cys Ile Leu Thr Thr Val Asp Pro Asp  
 210 215 220  
 Thr Gly Val Met Ser Arg Lys Glu Pro Leu Glu Thr Leu Lys Ser Tyr  
 225 230 235 240  
 Arg Gln Cys Asp Pro Ser Glu Arg Lys Leu Tyr Gly Lys Ser Pro Leu  
 245 250 255  
 Phe Gly Gln Tyr Phe Val Leu Glu Asn Pro Gly Thr Ile Lys Val Gly  
 260 265 270  
 Asp Pro Val Tyr Leu Leu Gly Gln  
 275 280

<210> 3807  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

<400> 3807  
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 cagggaggtc gcttccccgt gctcagctac caccgggtc ccagcggcag agggagcgcg  
 180



ccctccccac gctccgcccc tgggtggctg cgtcctttct gggccttttc tttttggccc  
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 372

<210> 3808

<211> 85

<212> PRT

<213> Homo sapiens

<400> 3808

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1				5				10						15	
Arg	Tyr	Pro	Arg	Ala	Val	Ile	Val	Pro	Tyr	Leu	Val	Asp	Asp	Asp	Ala
			20					25					30		
Leu	Ala	Arg	Ser	Ala	Arg	Phe	Arg	Gln	Gly	Gly	Arg	Phe	Pro	Val	Leu
			35				40					45			
Ser	Tyr	His	Pro	Ala	Pro	Ser	Gly	Arg	Gly	Ser	Ala	Pro	Ser	Pro	Arg
		50				55					60				
Ser	Ala	Pro	Gly	Trp	Leu	Arg	Pro	Phe	Trp	Ala	Phe	Ser	Phe	Trp	Pro
65					70				75					80	
Gly	Gln	Phe	Ala	Ala											
					85										

<210> 3809

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 3809

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 120  
 ataagctgtg actttttgcc cctgatgcca taagttggag ggtcctctgc tcaaaacata  
 180  
 tggtagacac ttctccttct tttcatctgg tatcatgtat catctctcag atccaataag  
 240  
 aaaacattcc cacgtccttc cctccctccc tagtaccaag gtcctcatct cagttttcat  
 300  
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 360  
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 420  
 aaggaattct ccaggaaggt aggcaggcct cctacaccat cccgcagggt atacaggggc  
 480  
 actcgcacca ggcccagcac ctccagcccg tggctccttg cgcggtgttg gccggcctcc  
 540  
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 660  
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 720  
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<210> 3810

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3810

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Ser	Trp	Arg	Ala	Ser	Ser	Asn	Cys	Ser	Arg	Ala	Glu	Pro	Ile	Lys	Glu
			20					25					30		
Phe	Ser	Arg	Lys	Val	Gly	Arg	Pro	Thr	Pro	Ser	Arg	Arg	Val	Tyr	
			35				40				45				
Arg	Gly	Thr	Arg	Thr	Arg	Pro	Ser	Thr	Ser	Ser	Pro	Trp	Ser	Leu	Ala
			50			55					60				
Arg	Val	Ala	Pro	Ala	Ser	Thr	Ala	Asn	Ser	Ser	Ser	Ser	Ser	Asp	Ala
						70				75				80	
Trp	His	Arg	Ser	Ala	Thr	Thr	Arg	Gly	Pro	Asp	Pro	Thr	Trp	Glu	Leu
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<210> 3811

<211> 296

<212> DNA

<213> Homo sapiens

<400> 3811

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<210> 3812

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3812

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Pro	Val	Leu	Lys	Ala	Gln	Asn	Cys	Arg	Pro	Ser	Gly	Arg	Pro	Val	Leu
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Pro	Tyr	Gln	Arg	Thr	Pro	Arg	Gln	Ile	Ser	Gly	Gln	Gln	Gly	His	Leu
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Thr	Trp	Gly	Ala	Cys	Trp	Gln	His	Cys	Leu	Asp	Ser	Arg	Ala	Ser	Leu
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Gly	Pro	Pro	Pro	Asn	Pro	Ala	Arg	Glu	Arg	Leu	Lys	Ala	Cys	Pro	Pro
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Cys	Trp	Ala	Trp	Val	Gly	Arg	Ser	Gly	Thr	Gly	Pro	Ser	Arg		
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<210> 3813

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 3813

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<210> 3814

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3814

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	20						25					30			
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	35					40						45			
Leu	His	Thr	Phe	Asp	Leu	Leu	Gly	Phe	Gly	Arg	Ser	Ser	Arg	Pro	Ala
	50					55				60					
Phe	Pro	Arg	Asp	Pro	Glu	Gly	Ala	Glu	Asp	Glu	Phe	Val	Thr	Ser	Ile
65					70					75				80	
Glu	Thr	Trp	Arg	Glu	Thr	Met	Gly	Ile	Pro	Ser	Met	Ile	Leu	Leu	Gly
		85						90					95		
His	Ser	Leu	Gly	Gly	Phe	Leu	Ala	Thr	Ser	Tyr	Ser	Ile	Lys	Tyr	Pro
		100					105					110			
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		115					120					125			
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<210> 3815
<211> 3669
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 3816

&lt;211&gt; 707

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3816

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		20					25					30			
Asp	Ile	Ile	Cys	Cys	Val	Phe	Leu	Leu	Ala	Ile	Val	Gly	Tyr	Val	
	35					40				45					
Ala	Val	Gly	Ile	Ile	Ala	Trp	Thr	His	Gly	Asp	Pro	Arg	Lys	Val	Ile

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Asn Glu Asn Lys Pro Tyr Leu Phe Tyr Phe Asn Ile Val Lys Cys Ala		80
	85	90
Ser Pro Leu Val Leu Leu Glu Phe Gln Cys Pro Thr Pro Gln Ile Cys		95
	100	105
Val Glu Lys Cys Pro Asp Arg Tyr Leu Thr Tyr Leu Asn Ala Arg Ser		110
	115	120
Ser Arg Asp Phe Glu Tyr Tyr Lys Gln Phe Cys Val Pro Gly Phe Lys		125
	130	135
Asn Asn Lys Gly Val Ala Glu Val Leu Arg Asp Gly Asp Cys Pro Ala		140
145	150	155
Val Leu Ile Pro Ser Lys Pro Leu Ala Arg Arg Cys Phe Pro Ala Ile		160
	165	170
His Ala Tyr Lys Gly Val Leu Met Val Gly Asn Glu Thr Thr Tyr Glu		175
	180	185
Asp Gly His Gly Ser Arg Lys Asn Ile Thr Asp Leu Val Glu Gly Ala		190
	195	200
Lys Lys Ala Asn Gly Val Leu Glu Ala Arg Gln Leu Ala Met Arg Ile		205
	210	215
Phe Glu Asp Tyr Thr Val Ser Trp Tyr Trp Ile Ile Ile Gly Leu Val		220
225	230	235
Ile Ala Met Ala Met Ser Leu Leu Phe Ile Ile Leu Leu Arg Phe Leu		240
	245	250
Ala Gly Ile Met Val Trp Val Met Ile Ile Met Val Ile Leu Val Leu		255
	260	265
Gly Tyr Gly Ile Phe His Cys Tyr Met Glu Tyr Ser Arg Leu Arg Gly		270
	275	280
Glu Ala Gly Ser Asp Val Ser Leu Val Asp Leu Gly Phe Gln Thr Asp		285
	290	295
Phe Arg Val Tyr Leu His Leu Arg Gln Thr Trp Leu Ala Phe Met Ile		300
305	310	315
Ile Leu Ser Ile Leu Glu Val Ile Ile Ile Leu Leu Leu Ile Phe Leu		320
	325	330
Arg Lys Arg Ile Leu Ile Ala Ile Ala Leu Ile Lys Glu Ala Ser Arg		335
	340	345
Ala Val Gly Tyr Val Met Cys Ser Leu Leu Tyr Pro Leu Val Thr Phe		350
	355	360
Phe Leu Leu Cys Leu Cys Ile Ala Tyr Trp Ala Ser Thr Ala Val Phe		365
	370	375
Leu Ser Thr Ser Asn Glu Ala Val Tyr Lys Ile Phe Asp Asp Ser Pro		380
385	390	395
Cys Pro Xaa Tyr Cys Glu Asn Leu Xaa Asn Pro Glu Thr Phe Pro Ser		400
	405	410
Ser Asn Glu Ser Arg Gln Cys Pro Asn Ala Arg Cys Gln Phe Ala Phe		415
	420	425
Tyr Gly Gly Glu Ser Gly Tyr His Arg Ala Leu Leu Gly Leu Gln Ile		430
	435	440
Phe Asn Ala Phe Met Phe Phe Trp Leu Ala Asn Phe Val Leu Ala Leu		445
	450	455
Gly Gln Val Thr Leu Ala Gly Ala Phe Ala Ser Tyr Tyr Trp Ala Leu		460
465	470	475
Arg Lys Pro Asp Asp Leu Pro Ala Phe Pro Leu Phe Ser Ala Phe Gly		480



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 Leu Ala Ile Val Gln Ile Ile Arg Val Ile Leu Glu Tyr Leu Asp Gln  
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 Arg Leu Lys Ala Ala Glu Asn Lys Phe Ala Lys Cys Leu Met Thr Cys  
 530 535 540  
 Leu Lys Cys Cys Phe Trp Cys Leu Glu Lys Phe Ile Lys Phe Leu Asn  
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 Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Thr Asn Phe Cys Thr  
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 Ala Val Leu Asp Lys Val Thr Asp Phe Leu Phe Leu Leu Gly Lys Leu  
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 Leu Ile Val Gly Ser Val Gly Ile Leu Ala Phe Phe Phe Phe Thr His  
 610 615 620  
 Arg Ile Arg Ile Val Gln Asp Thr Ala Pro Pro Leu Asn Tyr Tyr Trp  
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 Val Pro Ile Leu Thr Val Ile Val Gly Ser Tyr Leu Ile Ala His Gly  
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&lt;210&gt; 3817

&lt;211&gt; 419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3817

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&lt;210&gt; 3818

&lt;211&gt; 139

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3818

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Arg Glu Ile Asn Pro Leu Leu Phe Ser Tyr Val Glu Glu Leu Val Glu
      35           40           45
Ile Arg Lys Leu Arg Gln Asp Ile Leu Leu Met Lys Pro Tyr Phe Ile
      50           55           60
Thr Cys Arg Glu Ala Met Glu Ala Arg Leu Leu Leu Gln Asp Leu Leu
      65           70           75           80
Asp Val His Ala Gly Arg Leu Gly Cys Ser Leu Thr Glu Ile His Thr
      85           90           95
Leu Phe Ala Lys His Ile Lys Leu Asp Cys Glu Arg Cys Gln Ala Lys
      100          105          110
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Asp Ser His Thr Ser Val Cys Ala Asp Cys Phe
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<210> 3819

<211> 1731

<212> DNA

<213> Homo sapiens

<400> 3819

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&lt;210&gt; 3820

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3820

Thr	Pro	Pro	Pro	Pro	Gly	Met	Phe	Ile	Cys	Leu	Glu	Pro	Trp	Ala	Ser
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Ile	Ser	Gln	Gly	Ser	Leu	Thr	Ser	Pro	Thr	Pro	Arg	Ala	Ser	Leu	Leu
		20					25					30			
Tyr	Phe	Phe	Thr	Asn	Cys	Ser	Ile	Ser	Phe	Thr	Ser	Leu	Gly	Asp	Asn
		35				40					45				
Ser	Trp	His	Phe	Glu	Gly	Ser	Trp	Ser	Cys	Ala	Gly	Ser	Cys	Phe	Ala
	50				55					60					
Ser	Cys	Phe	Phe	Arg	Tyr	Cys	Ala	Pro	Ser	Glu	Pro	Ala	Thr	Gly	Arg
65				70					75					80	
Arg	Lys	Phe	Asp	Gly	Ala	Gly	Arg	Val	Ala	Val	Glu	Arg	Arg	Arg	Gly
			85				90						95		
Ser	Ser	Ala	Gly	Phe	Pro	Cys	Ser	Gln	Arg	Ser	Arg	Arg	Pro	Ala	Glu
		100					105						110		
Pro	Gly	Arg	Gly	Ile	Thr	Asp	Arg	Arg	Arg	Gly	Pro	Ile	Gly	Arg	

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Val Asn Met Asp Leu Glu Asn Lys Val Lys Lys Met Gly Leu Gly His		
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Glu Gln Gly Phe Gly Ala Pro Cys Leu Lys Cys Lys Glu Lys Cys Glu		
145	150	155
Gly Phe Glu Leu His Phe Trp Arg Lys Ile Cys Arg Asn Cys Lys Cys		
165	170	175
Gly Gln Glu Glu His Asp Val Leu Leu Ser Asn Glu Glu Asp Arg Lys		
180	185	190
Val Gly Lys Leu Phe Glu Asp Thr Lys Tyr Thr Thr Leu Ile Ala Lys		
195	200	205
Leu Lys Ser Asp Gly Ile Pro Met Tyr Lys Arg Asn Val Met Ile Leu		
210	215	220
Thr Asn Pro Val Ala Ala Lys Lys Asn Val Ser Ile Asn Thr Val Thr		
225	230	235
Tyr Glu Trp Ala Pro Pro Val Gln Asn Gln Ala Leu Ala Arg Gln Tyr		
245	250	255
Met Gln Met Leu Pro Lys Glu Lys Gln Pro Val Ala Gly Ser Glu Gly		
260	265	270
Ala Gln Tyr Arg Lys Lys Gln Leu Ala Lys Gln Leu Pro Ala His Asp		
275	280	285
Gln Asp Pro Ser Lys Cys His Glu Leu Ser Pro Arg Glu Val Lys Glu		
290	295	300
Met Glu Gln Phe Val Lys Lys Tyr Lys Ser Glu Ala Leu Gly Val Gly		
305	310	315
Asp Val Lys Leu Pro Cys Glu Met Asp Ala Gln Gly Pro Lys Gln Met		
325	330	335
Asn Ile Pro Gly Gly Asp Arg Ser Thr Pro Ala Ala Val Gly Ala Met		
340	345	350
Glu Asp Lys Ser Ala Glu His Lys Arg Thr Gln Tyr Ser Cys Tyr Cys		
355	360	365
Cys Lys Leu Ser Met Lys Glu Gly Asp Pro Ala Ile Tyr Ala Glu Arg		
370	375	380
Ala Gly Tyr Asp Lys Leu Trp His Pro Ala Cys Phe Val Cys Ser Thr		
385	390	395
Cys His Glu Leu Leu Val Asp Met Ile Tyr Phe Trp Lys Asn Glu Lys		
405	410	415
Leu Tyr Cys Gly Arg His Tyr Cys Asp Ser Glu Lys Pro Arg Cys Ala		
420	425	430
Gly Cys Asp Glu Leu Ile Phe Ser Asn Glu Tyr Thr Gln Ala Glu Asn		
435	440	445
Gln Asn Trp His Leu Lys His Phe Cys Cys Phe Asp Cys Asp Ser Ile		
450	455	460
Leu Ala Gly Glu Ile Tyr Val Met Val Asn Asp Lys Pro Val Cys Lys		
465	470	475
Pro Cys Tyr Val Lys Asn His Ala Val Val Arg Ser Val Leu Arg Ile		
485	490	495
Trp Leu Pro Gln Pro Ala Leu Gly Leu Glu Phe Met Leu Phe Leu Lys		
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Pro Leu Thr Asn Gly Lys Gln Lys Ala Val Leu Leu Ser Arg Lys Gln		
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Ile Ile Pro Thr Thr Gly Cys		
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&lt;210&gt; 3821

&lt;211&gt; 5212

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3821

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5212

&lt;210&gt; 3822

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3822

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Thr	Glu	Asp	Ile	Gln	Ala	Ala	Cys	Thr	Lys	Asp	Leu	Thr	Thr	Val	Ala
			20						25					30	
Val	Asp	Val	Val	Leu	Glu	Asn	Gly	Ser	Gln	Tyr	Arg	Cys	Gln	Pro	Phe
			35				40					45			
Arg	Ser	Asp	Leu	Val	Leu	Pro	Phe	Leu	Pro	Arg	Ala	Arg	Ala	Glu	Arg
	50					55					60				
Thr	Val	Met	Arg	Gln	Asp	Asn	Arg	Asp	Thr	Val	Asp	Asp	Thr	Val	Ser
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Ser	Glu	Ser	Leu	Gln	Ser	Leu	Phe	Ser	Glu	Trp	Asp	Asn	Pro	Val	Phe
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Ala	Arg	Tyr	Pro	Glu	Val	Ala	Val	Asp	Val	Ser	Ser	Gly	Gln	Ala	Glu
			100						105				110		
Ser	Leu	Ala	Val	Lys	Ile	His	Asn	Ile	Leu	Tyr	Pro	Tyr	Arg	Phe	Thr
			115				120					125			
Lys	Gly	Met	Ile	His	Ser	Met	Gln	Val	Leu	Gln	Gln	Val	Asp	Asn	Lys
			130				135					140			
Phe	Ile	Ala	Cys	Leu	Met	Ser	Thr	Lys	Thr	Glu	Glu	Asn	Gly	Glu	Ala
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Asp	Ser	Tyr	Glu	Lys	Gln	Gln	Ala	Gln	Gly	Ser	Gly	Arg	Lys	Lys	Leu
				165						170				175	
Leu	Ser	Ser	Thr	Leu	Ile	Pro	Pro	Leu	Glu	Ile	Thr	Val	Thr	Glu	Glu
				180					185					190	
Gln	Arg	Arg	Leu	Leu	Trp	Cys	Tyr	His	Lys	Asn	Leu	Glu	Asp	Leu	Gly
			195				200					205			
Leu	Glu	Phe	Val	Phe	Pro	Asp	Thr	Ser	Asp	Ser	Leu	Val	Leu	Val	Gly
	210					215					220				
Lys	Val	Pro	Leu	Cys	Phe	Val	Glu	Arg	Glu	Ala	Asn	Glu	Leu	Arg	Arg



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225          230          235          240
Gly Arg Ser Thr Val Thr Lys Ser Ile Val Glu Glu Phe Ile Arg Glu
          245          250          255
Gln Leu Glu Leu Leu Gln Thr Thr Gly Gly Ile Gln Gly Thr Leu Pro
          260          265          270
Leu Thr Val Gln Lys Val Leu Ala Ser Gln Ala Cys His Gly Ala Ile
          275          280          285
Lys Phe Asn Asp Gly Leu Ser Leu Gln Glu Ser Cys Arg Leu Ile Glu
          290          295          300
Ala Leu Ser Ser Cys Gln Leu Pro Phe Gln Cys Ala His Gly Arg Pro
305          310          315          320
Ser Met Leu Pro Leu Ala Asp Ile Asp His Leu Glu Gln Glu Lys Gln
          325          330          335
Ile Lys Pro Asn Leu Thr Lys Leu Arg Lys Met Ala Gln Ala Trp Arg
          340          345          350
Leu Phe Gly Lys Ala Glu Cys Asp Thr Arg Gln Ser Leu Gln Gln Ser
          355          360          365
Met Pro Pro Cys Glu Pro Pro
          370          375

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&lt;210&gt; 3823

&lt;211&gt; 6280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3823

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<212> PRT

<213> Homo sapiens

<400> 3824

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&lt;211&gt; 2051

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3825

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<213> Homo sapiens

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<213> Homo sapiens

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&lt;213&gt; Homo sapiens

&lt;400&gt; 3829

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&lt;210&gt; 3830

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3830

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 Phe Lys Gly Phe Arg Gly Gly Leu Asp Val Thr His Gly Gln Thr Gly  
 20 25 30  
 Val Glu Ser Val Tyr Thr Thr Phe Arg Asp Arg Glu Ile Met Phe His

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Val Ser Thr Lys Leu Pro Phe Thr Asp Gly Asp Ala Gln Gln Leu Gln
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Glu Asn Thr Pro Phe Val Pro Asp Met Ile Ala Ser Asn Phe Leu His
      85              90              95
Ala Tyr Ile Val Val Gln Val Glu Thr Pro Gly Thr Glu Thr Pro Ser
      100              105              110
Tyr Lys Val Ser Val Thr Ala Arg Glu Asp Val Pro Thr Phe Gly Pro
      115              120              125
Pro Leu Pro Ser Pro Pro Val Phe Gln Lys Gly Pro Glu Phe Arg Glu
      130              135              140
Phe Leu Leu Thr Lys Leu Thr Asn Ala Glu Asn Ala Cys Cys Lys Ser
145              150              155              160
Asp Lys Phe Ala Lys Leu Glu Asp Arg Thr Arg Ala Ala Leu Leu Asp
      165              170              175
Asn Leu His Asp Glu Leu His Ala His Thr Gln Ala Met Leu Gly Leu
      180              185              190
Gly Pro Glu Glu Asp Lys Phe Glu Asn Gly Gly His Gly Gly Phe Leu
      195              200              205
Glu Ser Phe Lys Arg Ala Ile Arg Val Arg Ser His Ser Met Glu Thr
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Met Val Gly Gly Gln Lys Lys Ser His Ser Gly Gly Ile Pro Gly Ser
225              230              235              240
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Phe Ser Pro Pro Val Val Ala Ala Thr Val Lys Asn Gln Ser Arg Ser
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      290              295              300
Pro Lys Thr Pro Asp Gly Gly His Ser Ser Gln Glu Ile Lys Ser Glu
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Thr Ser Ser Asn Pro Ser Ser Pro Glu Ile Cys Pro Asn Lys Glu Lys
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Pro Phe Met Lys Leu Lys Glu Asn Gly Arg Ala Ile Ser Arg Ser Ser
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Ser Ser Thr Ser Ser Val Ser Ser Thr Ala Gly Glu Gly Glu Ala Met
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Glu Glu Gly Asp Ser Gly Gly Ser Gln Pro Ser Thr Thr Ser Pro Phe
      370              375              380
Lys Gln Glu Val Phe Val Tyr Ser Pro Ser Pro Ser Ser Glu Ser Pro
385              390              395              400
Ser Leu Gly Ala Ala Thr Pro Ile Ile Met Ser Arg Ser Pro Thr
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Asp Ala Lys Ser Arg Asn Ser Pro Arg Ser Asn Leu Lys Phe Arg Phe
      420              425              430
Asp Lys Leu Ser His Ala Ser Ser Gly Ala Gly His
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&lt;210&gt; 3831

&lt;211&gt; 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3831

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gctcag
726

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&lt;210&gt; 3832

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3832

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Phe Ser Pro Glu Thr Asp Pro Leu Xaa Val Ser Gln Ile Pro Ala Ser
20          25          30
Leu Ser Ser Ala Leu Ala Cys Tyr Gly Leu Ser Phe Leu Gln Leu His
35          40          45
Ser Thr Asn Ser His Ile Asp Arg Ile Asn Phe Ser Val Lys Met Val
50          55          60
Ser Ser Ile Leu Gln Ile Pro Lys Leu Ser Tyr Leu Gly Leu Gly Asp
65          70          75          80
Ile Lys Asn Met Glu Gln Lys Tyr Cys Asn Leu Cys Ile Gln Leu Phe
85          90          95
Ile Ser Phe Leu Leu Leu Thr Val Gln Thr Phe
100          105

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&lt;210&gt; 3833

&lt;211&gt; 1764

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3833

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<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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			20					25					30		
Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp
		35					40					45			
Leu	Leu	Leu	Leu	Ser	Ser	Glu	Ala	Arg	Pro	Val	Leu	Phe	Glu	Gly	Pro
	50					55				60					
Ala	Ser	Ser	Gly	Ala	Gly	Ala	Glu	Ser	Phe	Glu	Gln	Gly	Arg	Asp	Thr
65					70				75					80	
Ile	Ile	Ala	Arg	Thr	Lys	Gly	Leu	Ser	Ile	Leu	Thr	His	Asp	Val	Gln
			85					90					95		
Ser	Gln	Leu	Asn	Met	Gly	Arg	Phe	Gly	Glu	Ala	Gly	Asp	Ser	Leu	Val
		100						105				110			
Glu	Leu	Gly	Asp	Leu	Val	Val	Ser	Leu	Thr	Glu	Cys	Ser	Ala	His	Ala
	115						120					125			
Ala	Tyr	Leu	Ala	Ala	Val	Ala	Thr	Pro	Gly	Ala	Gln	Pro	Ala	Gln	Pro
	130					135					140				
Gly	Leu	Val	Asp	Arg	Tyr	Arg	Val	Thr	Arg	Cys	Arg	His	Glu	Val	Glu
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Gln	Gly	Cys	Ala	Val	Leu	Arg	Ala	Thr	Pro	Leu	Ala	Asp	Met	Thr	Pro
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			245					250					255		
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His Arg Glu Arg Leu Arg Asn Ser Ala Cys Ala Val Ser Glu Gly Cys				320
		325		330
Thr Leu Leu Ser Gln Ala Leu Arg Glu Arg Ser Ser Pro Arg Thr Leu				335
		340		345
Pro Pro Val Asn Ser Asn Ser Val Asn				350
		355		360

&lt;210&gt; 3835

&lt;211&gt; 2366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3835

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1140

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&lt;210&gt; 3836

&lt;211&gt; 479

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3836

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			20				25					30			
Gly	Gly	Ile	Glu	Gln	Met	Gly	Leu	Ala	Met	Glu	His	Gly	Gly	Ser	Tyr

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 Val Leu Phe Met Val Tyr Gly Asn Val His Val Ser Thr Glu Ser Asn  
 85 90 95  
 Leu Gln Ala Thr Glu Arg Arg Ala Glu Gly Leu Tyr Ser Gln Leu Leu  
 100 105 110  
 Gly Leu Thr Ala Ser Gln Ser Asn Leu Thr Lys Glu Leu Asn Phe Thr  
 115 120 125  
 Thr Arg Ala Lys Asp Ala Ile Met Gln Met Trp Leu Asn Ala Arg Arg  
 130 135 140  
 Asp Leu Asp Arg Ile Asn Ala Ser Phe Arg Gln Cys Gln Gly Asp Arg  
 145 150 155 160  
 Val Ile Tyr Thr Asn Asn Gln Arg Tyr Met Ala Ala Ile Ile Leu Ser  
 165 170 175  
 Glu Lys Gln Cys Arg Asp Gln Phe Lys Asp Met Asn Lys Ser Cys Asp  
 180 185 190  
 Ala Leu Leu Phe Met Leu Asn Gln Lys Val Lys Thr Leu Glu Val Glu  
 195 200 205  
 Ile Ala Lys Glu Lys Thr Ile Cys Thr Lys Asp Lys Glu Ser Val Leu  
 210 215 220  
 Leu Asn Lys Arg Val Ala Glu Glu Gln Leu Val Glu Cys Val Lys Thr  
 225 230 235 240  
 Arg Glu Leu Gln His Gln Glu Arg Gln Leu Ala Lys Glu Gln Leu Gln  
 245 250 255  
 Lys Val Gln Ala Leu Cys Leu Pro Leu Asp Lys Asp Lys Phe Glu Met  
 260 265 270  
 Asp Leu Arg Asn Leu Trp Arg Asp Ser Ile Ile Pro Arg Ser Leu Asp  
 275 280 285  
 Asn Leu Gly Tyr Asn Leu Tyr His Pro Leu Gly Ser Glu Leu Ala Ser  
 290 295 300  
 Ile Arg Arg Ala Cys Asp His Met Pro Ser Leu Met Ser Ser Lys Val  
 305 310 315 320  
 Glu Glu Leu Ala Arg Ser Leu Arg Ala Asp Ile Glu Arg Val Ala Arg  
 325 330 335  
 Glu Asn Ser Asp Leu Gln Arg Gln Lys Leu Glu Ala Gln Gln Gly Leu  
 340 345 350  
 Arg Ala Ser Gln Glu Ala Lys Gln Lys Val Glu Lys Glu Ala Gln Ala  
 355 360 365  
 Arg Glu Ala Lys Leu Gln Ala Glu Cys Ser Arg Gln Thr Gln Leu Ala  
 370 375 380  
 Leu Glu Glu Lys Ala Val Leu Arg Lys Glu Arg Asp Asn Leu Ala Lys  
 385 390 395 400  
 Glu Leu Glu Glu Lys Lys Arg Glu Ala Glu Gln Leu Arg Met Glu Leu  
 405 410 415  
 Ala Ile Arg Asn Ser Ala Leu Asp Thr Cys Ile Lys Thr Lys Ser Gln  
 420 425 430  
 Pro Met Met Pro Val Ser Arg Pro Met Gly Pro Val Pro Asn Pro Gln  
 435 440 445  
 Pro Ile Asp Pro Ala Ser Leu Glu Glu Phe Lys Arg Lys Ile Leu Glu  
 450 455 460  
 Ser Gln Arg Pro Pro Ala Gly Ile Pro Val Ala Pro Ser Ser Gly

465

470

475

&lt;210&gt; 3837

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3837

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 120  
 ggggactgcc aactcatgtg tctgttttagc tcaccttttc ctgtgcccac cctccaaccc  
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 1380

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 1980  
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 2084

<210> 3838

<211> 468

<212> PRT

<213> Homo sapiens

<400> 3838

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			20					25					30		
Ser	His	Leu	Pro	Pro	Glu	His	Ser	Asp	Val	Val	Ile	Val	Gly	Gly	Gly
		35					40					45			
Val	Leu	Gly	Leu	Ser	Val	Ala	Tyr	Trp	Leu	Lys	Lys	Leu	Glu	Ser	Arg
	50					55					60				
Arg	Gly	Ala	Ile	Arg	Val	Leu	Val	Val	Glu	Arg	Asp	His	Thr	Tyr	Ser
65					70					75					80
Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val	Gly	Gly	Ile	Cys	Gln	Gln	Phe	Ser
				85					90					95	
Leu	Pro	Glu	Asn	Ile	Gln	Leu	Ser	Leu	Phe	Ser	Ala	Ser	Phe	Leu	Arg
			100					105					110		
Asn	Ile	Asn	Glu	Tyr	Leu	Ala	Val	Val	Asp	Ala	Pro	Pro	Leu	Asp	Leu
	115						120						125		
Arg	Phe	Asn	Pro	Ser	Gly	Tyr	Leu	Leu	Leu	Ala	Ser	Glu	Lys	Asp	Ala
	130					135					140				
Ala	Ala	Met	Glu	Ser	Asn	Val	Lys	Val	Gln	Arg	Gln	Glu	Gly	Ala	Lys
145					150					155					160
Val	Ser	Leu	Met	Ser	Pro	Asp	Gln	Leu	Arg	Asn	Lys	Phe	Pro	Trp	Ile
				165					170					175	
Asn	Thr	Glu	Gly	Val	Ala	Leu	Ala	Ser	Tyr	Gly	Met	Glu	Asp	Glu	Gly

180 185 190  
 Trp Phe Asp Pro Trp Cys Leu Leu Gln Gly Leu Arg Arg Lys Val Gln  
 195 200 205  
 Ser Leu Gly Val Leu Phe Cys Gln Gly Glu Val Thr Arg Phe Val Ser  
 210 215 220  
 Ser Ser Gln Arg Met Leu Thr Thr Asp Asp Lys Ala Val Val Leu Lys  
 225 230 235 240  
 Arg Ile His Glu Val His Val Lys Met Asp Arg Ser Leu Glu Tyr Gln  
 245 250 255  
 Pro Val Glu Cys Ala Ile Val Ile Asn Ala Ala Gly Ala Trp Ser Ala  
 260 265 270  
 Gln Ile Ala Ala Leu Ala Gly Val Gly Glu Gly Pro Pro Gly Thr Leu  
 275 280 285  
 Gln Gly Thr Lys Leu Pro Val Glu Pro Arg Lys Arg Tyr Val Tyr Val  
 290 295 300  
 Trp His Cys Pro Gln Gly Pro Gly Leu Glu Thr Pro Leu Val Ala Asp  
 305 310 315 320  
 Thr Ser Gly Ala Tyr Phe Arg Arg Glu Gly Leu Gly Ser Asn Tyr Leu  
 325 330 335  
 Gly Gly Arg Ser Pro Thr Glu Gln Glu Glu Pro Asp Pro Ala Asn Leu  
 340 345 350  
 Glu Val Asp His Asp Phe Phe Gln Asp Lys Val Trp Pro His Leu Ala  
 355 360 365  
 Leu Arg Val Pro Ala Phe Glu Thr Leu Lys Cys Phe Val His Pro Gln  
 370 375 380  
 Val Gln Ser Ala Trp Ala Gly Tyr Tyr Asp Tyr Asn Thr Phe Asp Gln  
 385 390 395 400  
 Asn Gly Val Val Gly Pro His Pro Leu Val Val Asn Met Tyr Phe Ala  
 405 410 415  
 Thr Gly Phe Ser Gly His Gly Leu Gln Gln Ala Pro Gly Ile Gly Arg  
 420 425 430  
 Ala Val Ala Glu Met Val Leu Lys Gly Arg Phe Gln Thr Ile Asp Leu  
 435 440 445  
 Ser Pro Phe Leu Phe Thr Arg Phe Tyr Leu Gly Glu Lys Ile Gln Glu  
 450 455 460  
 Asn Asn Ile Ile  
 465

&lt;210&gt; 3839

&lt;211&gt; 758

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3839

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 120  
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 180  
 gctttggggc aagccatcac cctccatcca gaatctgcc tttcaaaaag caagatgggg  
 240  
 ctaaccccc tatggcgaga cagctcagct ctctcaagcc agcggaatag tttcccaact  
 300

tccttttggga ccagctctta ccagccccc cctgcacctt gtttgggggg agttcatcct  
 360  
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 420  
 ggacacaacc tgcatacagac tggcccagcc cctccccctg ctgtgtctga gtcttggcct  
 480  
 tatectttga catctcaggt gagcccatcc tacagccata tgcatacaggt gtacatgcgg  
 540  
 caccaccacc ctcatgccc aatgcaccac cgccaccgcc accatcatca ccatcaccac  
 600  
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 660  
 gcggccagga ttctgtctcc ccagtgtgac atcacaaga cagaaccaac tacagtcacc  
 720  
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 758

<210> 3840

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3840

Xaa	Arg	Val	Gln	Asp	Ser	Leu	Glu	Val	Thr	Leu	Pro	Ser	Lys	Gln	Glu
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Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Asp	Gln	Pro	Ala	Glu
		20						25				30			
Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly
		35					40					45			
Asp	Ile	Gly	Ser	Val	Val	Asp	Glu	His	Phe	Ser	Arg	Ala	Leu	Gly	Gln
	50					55					60				
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly
65				70					75					80	
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn
			85						90					95	
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala
			100					105						110	
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro
		115						120					125		
Gly	Thr	Phe	Ser	Ala	Ala	Asp	Pro	Ser	Pro	Trp	Pro	Gly	His	Asn	Leu
		130				135						140			
His	Gln	Thr	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Val	Ser	Glu	Ser	Trp	Pro
145					150					155					160
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp
			165						170					175	
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His
			180					185						190	
Arg	His	His	His	His	His	His	His	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp
		195					200					205			
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile
		210				215						220			
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr
225					230					235					240
Ser	Ala	Thr	Ser	Ala	Trp	Ala	Gly	Ala	Phe	His	Gly				



245

250

<210> 3841  
 <211> 367  
 <212> DNA  
 <213> Homo sapiens

<400> 3841  
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 atagtgtgct ttctcttcct cattgaacat ccgaacgacg tcaggtgctc ctccaccctg  
 180  
 gtgacgcact caaaaggcta tgagaatggg acaaacaggt tgagcctccc gaagccaatc  
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 ttgaagagcg aaaagaacaa gcctctggac ccagagatgc agtgctgct gctctcagat  
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 360  
 ccggccg  
 367

<210> 3842  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 3842  
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 Ala Gly Tyr Trp Val Ser Thr Cys Trp Gly Leu Ser Phe Val Val Pro  
 20 25 30  
 Gly Ala Ile Val Ala Ala Met Gly Ile Val Cys Phe Leu Phe Leu Ile  
 35 40 45  
 Glu His Pro Asn Asp Val Arg Cys Ser Ser Thr Leu Val Thr His Ser  
 50 55 60  
 Lys Gly Tyr Glu Asn Gly Thr Asn Arg Leu Ser Leu Pro Lys Pro Ile  
 65 70 75 80  
 Leu Lys Ser Glu Lys Asn Lys Pro Leu Asp Pro Glu Met Gln Cys Leu  
 85 90 95  
 Leu Leu Ser Asp Gly Lys Gly Ser Ile His Pro Asn His Val Val Ile  
 100 105 110  
 Leu Pro Gly Asp Gly Gly Ser Gly Pro Ala  
 115 120

<210> 3843  
 <211> 712  
 <212> DNA  
 <213> Homo sapiens

<400> 3843  
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 120  
 tcccgaagc gctcgaggag tcgcagccgg tcccggggac gggggtcgga aaagagaaaag  
 180  
 aagaagagca ggaaagacac ctgcaggaac tgctcggcct ccacatccca aggtcgcaag  
 240  
 gccagcacgg cccttggggc ggaggcctca cttctccct gcacacaga gagaagcaag  
 300  
 cagaaggccc ggaggagaac aagatccagc tcctcctcct cttcttccag ttcttctagc  
 360  
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 420  
 aagtacaagg acaagaggag gaagaagaag aagaagagga agaagctgaa gaagaagggc  
 480  
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 540  
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 660  
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 712

&lt;210&gt; 3844

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3844

Met	Ala	His	Val	Gly	Ser	Arg	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser
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Arg	Gly	Arg	Gly	Ser	Glu	Lys	Arg	Lys	Lys	Lys	Ser	Arg	Lys	Asp	Thr
			20					25					30		
Ser	Arg	Asn	Cys	Ser	Ala	Ser	Thr	Ser	Gln	Gly	Arg	Lys	Ala	Ser	Thr
		35					40					45			
Ala	Pro	Gly	Ala	Glu	Ala	Ser	Pro	Ser	Pro	Cys	Ile	Thr	Glu	Arg	Ser
	50					55					60				
Lys	Gln	Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65					70					75				80	
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			85						90					95	
Ser	Ser	Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg
			100					105					110		
Lys	Lys	Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys
		115					120					125			
Ala	Glu	Ala	Gln	Gln	Ala	Glu	His	His	Pro	Gln	Gly	Gly	Gly	Pro	
	130						135					140			

&lt;210&gt; 3845

&lt;211&gt; 2302

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3845

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120  
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180  
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240  
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420  
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720  
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960  
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1380  
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1620

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 2160  
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 2280  
 aaaaaaaaaa aaaaaaaaaa aa  
 2302

&lt;210&gt; 3846

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3846

Ser	Cys	Lys	Gly	Asn	His	Ala	Lys	Glu	Ala	Gly	Cys	Thr	Ile	Arg	Ala
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Cys	Arg	Ala	Gly	Leu	Trp	Gly	Pro	Ala	Asp	Pro	Ser	Ser	Gln	Asn	Gln
			20					25					30		
Gly	Pro	Ala	Glu	Pro	Arg	Val	Ala	Gly	Ala	Gly	Ala	Ala	Ala	Ala	Glu
		35					40					45			
Gly	Ala	Ala	Ala	Gly	Ala	Cys	Gly	Pro	Ala	Arg	Cys	Ala	Asp	Gln	Gly
	50					55					60				
Gly	Ala	Arg	Glu	Arg	Gly	Gly	Arg	Gly	Gly	Arg	Gly	Ala	Gly	Gly	Gly
65				70					75					80	
Gly	Gly	Ala	His	Gly	His	Phe	Pro	Gln	Arg	Pro	Pro	Gln	Gln	Ala	Gly
			85						90				95		
Gln	Arg	Ala	Ala	Ser	Arg	Ala	Gly	Cys	Gly	His	Arg	Gln	Leu	Gln	Arg
		100						105					110		
Ala	Pro	Ala	Pro	Gly	Leu	Arg	Gln	His	Pro	Cys	Gly	Ser	Gly	Thr	Glu
		115					120					125			
Gly	Leu	Arg	Gly	Gly	His	Leu	Ser	Glu	Thr	Val	Cys	Ala	His	Ala	Glu
	130					135					140				
Arg	Thr	Gln	Ala	Pro	Leu	Gln	Ser	Ala	Leu	Gly	Gln	Pro	Ala	Pro	Arg
145					150					155				160	
Pro	His	Thr	Leu	Gln	Arg	His	Leu	Gly	Pro	His	Ala	Thr	Gly	His	Gly
			165					170					175		
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Cys Cys Phe Pro Gly  
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185

190

<210> 3847  
<211> 1570  
<212> DNA  
<213> Homo sapiens

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120  
ttctggaatt cctcctcctt aggcaagcct atcacagcat cctgaccctg ggggcctctg  
180  
tgcagctggt gtttggtctt gaggtaaaac tggcttgagg ggttgagagg acaagcccg  
240  
ggtgacccca catgtgcctt gaataaccca acagaccctt cctcagcacc tgctatgtgg  
300  
ccaacctgtg ctggccacca aggggcagtg atcagatatg gctcctgccc tccacacgct  
360  
cactcctagg tgactgggga gacgcacaaa gaggctagga cagaggagga gcccacact  
420  
ggggctcagg agaggggtcc tggaggctcg tgccggagct agctggtaat ggacaggaga  
480  
ggattagttc catggacaac tggaggcgtg tccctggcag agagagaatg tgttcagtga  
540  
cgacagctca tatttggtga gtgcgaattt cacaccaggc cctatgctga gctcctgacc  
600  
tgcattctctt attcagcaag acaatactgt tataaaggaa cagttaatta tgtcatttta  
660  
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720  
taggaggacc ctgggtgtgt ctagagcctg tgattgtacc actgcacctg ctgtgcagag  
780  
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840  
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900  
tgctgcactc cgtggacctc cagagtgaga acccctggga caacaaggct gtgtacatgc  
960  
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1200  
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1260  
aagaaagctg tgacagatgc catcatgtct cgcagagcca tccgcaacat gaacaccctg  
1320

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<210> 3848

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3848

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Phe	Lys	Lys	Ala	Val	Thr	Asp	Ala	Ile	Met	Ser	Arg	Arg	Ala	Ile	Arg
			20					25					30		
Asn	Met	Asn	Thr	Leu	Tyr	Pro	Asp	Ala	Thr	Pro	Glu	Glu	Leu	Gln	Ala
		35					40					45			
Met	Asp	Asn	Val	Cys	Ile	Ile	Cys	Arg	Glu	Glu	Met	Val	Thr	Gly	Ala
	50					55					60				
Lys	Arg	Leu	Pro	Cys	Asn	His	Ile	Phe	His	Thr	Arg	Trp	Glu	Gly	Pro
65					70					75				80	
Trp	Gly	Ala	Cys	Pro	Ala	Gly	Pro	Arg	Pro	Gln	Lys	Ala	Gly	Pro	Lys
			85					90					95		
Gly	Pro	Ala	Asp	Leu	Cys	Leu	Ala	Leu	Thr	Arg	Ser	Cys	Leu	Arg	Ser
		100					105						110		
Trp	Phe	Gln	Arg	Gln	Gln	Thr	Cys								
		115					120								

<210> 3849

<211> 1139

<212> DNA

<213> Homo sapiens

<400> 3849

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 120  
 gatcacgcgc agcgggaacc cgggtctctga gtccgccccg tgcgttgctg catcagagtc  
 180  
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 240  
 gtcgatcctg ggccagcatg gcggcgccca tgtaaccggt tccgtgccgc aaagcgaacg  
 300  
 gcggccgcgg cgcgggcccc gcgggggtta gaggtcacca tgctgagggg cgcgtggagg  
 360  
 acgctgagtt tgattcggac ccgggcagtt acccaggtcc tagtaccggt gctgccgggc  
 420

ggtgggagcg ccaagtttcc tttcaaccag tggggcctgc agcctcgaag tctcctcctc  
 480  
 caggccgcgc gcggatatgt cgtccgaaa ccagcccagt ctaggctgga tgatgaccca  
 540  
 cctccttcta cgctgctcaa agactaccag aatgtccctg gaattgagaa ggttgatgat  
 600  
 gtcgtgaaaa gactcttgtc tttggaaatg gccacaaga aggagatgct aaaaatcaag  
 660  
 caagaacagt ttatgaagaa gattgttgca aaccagagg acaccagatc cctggaggct  
 720  
 cgaattattg ccttgtctgt caagatccgc agttatgaag aacacttgga gaaacatcga  
 780  
 aaggacaaag ccacaaaacg ctatctgcta atgagcattg accagaggaa aaagatgctc  
 840  
 aaaaacctcc gtaacaccaa ctatgatgtc tttgagaaga tatgctgggg gctgggaatt  
 900  
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 960  
 gctctgtgca ttggggtttt ccaggagact caaaagctga agaagcgaag aagagcctta  
 1020  
 aaggctgcag cagcagccca aaaacaagca aagcggagga acccagacag ccctgccaaa  
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<210> 3850

<211> 257

<212> PRT

<213> Homo sapiens

<400> 3850

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		20						25					30		
Phe	Pro	Phe	Asn	Gln	Trp	Gly	Leu	Gln	Pro	Arg	Ser	Leu	Leu	Leu	Gln
	35						40					45			
Ala	Ala	Arg	Gly	Tyr	Val	Val	Arg	Lys	Pro	Ala	Gln	Ser	Arg	Leu	Asp
	50					55					60				
Asp	Asp	Pro	Pro	Pro	Ser	Thr	Leu	Leu	Lys	Asp	Tyr	Gln	Asn	Val	Pro
65					70					75				80	
Gly	Ile	Glu	Lys	Val	Asp	Asp	Val	Val	Lys	Arg	Leu	Leu	Ser	Leu	Glu
			85						90					95	
Met	Ala	Asn	Lys	Lys	Glu	Met	Leu	Lys	Ile	Lys	Gln	Glu	Gln	Phe	Met
		100						105					110		
Lys	Lys	Ile	Val	Ala	Asn	Pro	Glu	Asp	Thr	Arg	Ser	Leu	Glu	Ala	Arg
		115					120					125			
Ile	Ile	Ala	Leu	Ser	Val	Lys	Ile	Arg	Ser	Tyr	Glu	Glu	His	Leu	Glu
	130					135					140				
Lys	His	Arg	Lys	Asp	Lys	Ala	His	Lys	Arg	Tyr	Leu	Leu	Met	Ser	Ile
145				150						155				160	
Asp	Gln	Arg	Lys	Lys	Met	Leu	Lys	Asn	Leu	Arg	Asn	Thr	Asn	Tyr	Asp
			165					170					175		
Val	Phe	Glu	Lys	Ile	Cys	Trp	Gly	Leu	Gly	Ile	Glu	Tyr	Thr	Phe	Pro

[illegible]

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<210> 3851
<211> 1183
<212> DNA
<213> Homo sapiens
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120
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cgaggccctt agggtagcgc ccgatttggc cccatgggtg gtttcggggc caaccggcgg
240
gctggccgcc tgccctctct cgtgctggtg gtgctgctgg tggtgatcgt cgtcctcgcc
300
ttcaactact ggagcatctc ctcccgccac gtctgtcttc aggaggagggt ggccgagctg
360
cagggccagg tccagcgcac cgaagtggcc cgcgggcggc tggaaaagcg caattcggac
420
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480
cgcctcagca gccggctgca ggccagagag ggcctcggga agagatgcga ggatgacaag
540
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600
cttgctgagc ttcgtcagga atttcttcga caagaagacc agcttcagga ctataggaag
660
aacaatactt accttgtaga gaggttagaa tatgaaagt ttcagtgtgg acagcagatg
720
aaggaattga gagcacagca tgaagaaaat attaaaaagt tagcagacca gtttttagag
780
gaacaaaagc aagagaccca aaagattcaa tcaaatgatg gaaaggaatt ggatataaac
840
aatcaagtag tacctaaaaa tattccaaaa gtagctgaga atgttgcgaga taagaatgaa
900
gaaccctcaa gcaatcatat tccacatggg aaagaacaaa tcaaaagagg tgggtgatgca
960
gggatgcctg gaatagaaga gaatgacctt gcaaaagttg atgatcttcc cctgtcttta
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aggaagcctc ctatttcagt ttctcaacat gaaagtcac aagcaatctc ccatcttcca
1080

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<210> 3852
<211> 323
<212> PRT
<213> Homo sapiens
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3003

<210> 3853  
 <211> 375  
 <212> DNA  
 <213> Homo sapiens

<400> 3853  
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 120  
 atggacgaac gaaggactat taaactcagt gagggttaca gaggatttgc tgactcagaa  
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 cgcaaaagtta ttcccatcat ttcaaaatgt ttggaaggaa tgattcttgc agcaaaatca  
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 gttgatgaaa gaagagactc tcaaatgggtg gtagactcct tcaaatctgg ttttgaacct  
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 360  
 actatcagtg catcc  
 375

<210> 3854  
 <211> 125  
 <212> PRT  
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<400> 3854  
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 Gln Asn Phe Asn Gly Glu Gln His Lys His Phe Tyr Val Val Ile Pro  
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 Gln Ile Tyr Lys Gln Leu Gln Glu Met Asp Glu Arg Arg Thr Ile Lys  
 35 40 45  
 Leu Ser Glu Cys Tyr Arg Gly Phe Ala Asp Ser Glu Arg Lys Val Ile  
 50 55 60  
 Pro Ile Ile Ser Lys Cys Leu Glu Gly Met Ile Leu Ala Ala Lys Ser  
 65 70 75 80  
 Val Asp Glu Arg Arg Asp Ser Gln Met Val Val Asp Ser Phe Lys Ser  
 85 90 95  
 Gly Phe Glu Pro Pro Gly Asp Phe Pro Phe Glu Asp Tyr Ser Gln His  
 100 105 110  
 Ile Tyr Arg Thr Ile Ser Asp Gly Thr Ile Ser Ala Ser  
 115 120 125

<210> 3855  
 <211> 1377  
 <212> DNA  
 <213> Homo sapiens

<400> 3855  
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 120

cagaactgtg gctctggtgt ggttgggata gtggactatg gacctagacc caacaagagt  
 180  
 gaaatgtggg atgtcttctg ctatcggatg aaagatgtga actgcacctg caaggtgggc  
 240  
 tatgtgggag atggcttctc atgcagtggg aacctgctgc aggtcctgat gtccttcccc  
 300  
 tcactcaca acttctgac ggaagtgtg gcctattcca acagctcagc tcgaggccgt  
 360  
 gcatttctag aacacctgac tgacctgtcc atccgaggca cctctttgt gccacagaac  
 420  
 agtgggctgg gggagaatga gaccttgtct gggcgggaca tcgagcacca cctcgccaat  
 480  
 gtcagcatgt ttttctacaa tgacctgtc aatggcaccn accctgcaaa cgaggggtggg  
 540  
 aagcaagctg ctcatcactg ccagccagga cccactnncc aaccgacgga gaccaggttt  
 600  
 gttgatggaa gagccattct gcagtgggac atctttgcct ccaatgggat cattcatgtc  
 660  
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 720  
 gcagggatct tctttgccat catcctggtg actggggctg ttgccttggc tgcttactcc  
 780  
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 aatgttgcag ctcttgga gacagcagcct gagaatatct cgaaccctt gtatgagagc  
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 960  
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 1080  
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 1140  
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 1200  
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 1377

<210> 3856

<211> 330

<212> PRT

<213> Homo sapiens

<400> 3856

Xaa	Ala	Ala	Thr	Met	Ala	Thr	Tyr	Asn	Gln	Leu	Ser	Tyr	Ala	Gln	Lys
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Ala	Lys	Tyr	His	Leu	Cys	Ser	Ala	Gly	Trp	Leu	Glu	Thr	Gly	Arg	Val
			20					25					30		
Ala	Tyr	Pro	Thr	Ala	Phe	Ala	Ser	Gln	Asn	Cys	Gly	Ser	Gly	Val	Val

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<210> 3857
<211> 797
<212> DNA
<213> Homo sapiens
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3006

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 420  
 ccggctacgc ggctccagg cagctcaaag atcccttcct tagcttcgga gactccagac  
 480  
 aatcgctttt tgcttcctcg tcggagcact cctcgagaa cgggagcttg cgcttctcca  
 540  
 caccgcccgg ggagctggac ggagggatct cggggcgag cggcacggga agtggaggga  
 600  
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 660  
 gcgacacttg ttcttcacac acccccatc ggcgtagtac ccagagagct caagatgtgt  
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<210> 3858

<211> 76

<212> PRT

<213> Homo sapiens

<400> 3858

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Ala	Thr	Arg	Ala	Ala	Pro	Cys	Pro	Thr	Ser	Cys	Arg	Ala	Trp	Cys	Ser
			20					25					30		
Ala	Pro	Cys	Ser	Thr	Ser	Ala	Arg	Pro	Ser	Thr	Arg	Ser	Trp	Ala	Arg
			35				40					45			
Ser	Ile	Ser	Ala	Ala	Thr	Trp	Pro	Arg	Pro	Arg	Ala	Thr	Gly	Thr	Leu
	50					55				60					
Ala	Thr	Lys	Thr	Arg	Trp	Pro	Ala	Ser	Arg	Thr	Ala				
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<210> 3859

<211> 1449

<212> DNA

<213> Homo sapiens

<400> 3859

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 120  
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 180  
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 240  
 ggatccatac gttataagca ccgctacagt ggcaggacag ctttgcaaact gagccgagat  
 300  
 ctttctattc agcttccccg gcctgatcag aatgtgacaa gaagtcgaag caagacttac  
 360

cctaagcgaa tagcacaaac acagccagct gaatcaaaca ccatcagtag gataactgca  
 420  
 aacatggaaa atggagaaaa tgaaggaaca attaaaatta ttgcaccttc accagtaaaa  
 480  
 agctttaaga aagcaaagaa tgaaaatagc cctgataccc aaagaagcaa atctcatgca  
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 ccgtgggaag aaaatggccc ccagagtgga ctctacaatt ctcccagtga tcgcactaag  
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 1140  
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 1260  
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<210> 3860

<211> 348

<212> PRT

<213> Homo sapiens

<400> 3860

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				20				25					30		
Asp	Cys	Asn	Glu	Thr	Ser	Phe	Phe	Phe	Glu	Ala	Arg	Ser	Lys	Thr	Ala
		35					40					45			
Cys	Lys	His	Leu	Trp	Lys	Cys	Ser	Val	Glu	His	His	Thr	Phe	Phe	Arg
	50					55				60					
Met	Pro	Glu	Asn	Glu	Ser	Asn	Ser	Leu	Ser	Arg	Lys	Leu	Ser	Lys	Phe

65					70					75					80
Gly	Ser	Ile	Arg	Tyr	Lys	His	Arg	Tyr	Ser	Gly	Arg	Thr	Ala	Leu	Gln
				85					90					95	
Met	Ser	Arg	Asp	Leu	Ser	Ile	Gln	Leu	Pro	Arg	Pro	Asp	Gln	Asn	Val
			100					105					110		
Thr	Arg	Ser	Arg	Ser	Lys	Thr	Tyr	Pro	Lys	Arg	Ile	Ala	Gln	Thr	Gln
		115					120					125			
Pro	Ala	Glu	Ser	Asn	Thr	Ile	Ser	Arg	Ile	Thr	Ala	Asn	Met	Glu	Asn
	130					135					140				
Gly	Glu	Asn	Glu	Gly	Thr	Ile	Lys	Ile	Ile	Ala	Pro	Ser	Pro	Val	Lys
145					150					155				160	
Ser	Phe	Lys	Lys	Ala	Lys	Asn	Glu	Asn	Ser	Pro	Asp	Thr	Gln	Arg	Ser
			165						170					175	
Lys	Ser	His	Ala	Pro	Trp	Glu	Glu	Asn	Gly	Pro	Gln	Ser	Gly	Leu	Tyr
			180					185					190		
Asn	Ser	Pro	Ser	Asp	Arg	Thr	Lys	Ser	Pro	Lys	Phe	Pro	Tyr	Thr	Arg
		195					200					205			
Arg	Arg	Asn	Pro	Ser	Cys	Gly	Ser	Asp	Asn	Asp	Ser	Val	Gln	Pro	Val
		210				215					220				
Arg	Arg	Arg	Lys	Ala	His	Asn	Ser	Gly	Glu	Asp	Ser	Asp	Leu	Lys	Gln
225					230					235				240	
Arg	Arg	Arg	Ser	Arg	Ser	Arg	Cys	Asn	Thr	Ser	Ser	Gly	Ser	Glu	Ser
			245						250					255	
Glu	Asn	Ser	Asn	Arg	Glu	His	Arg	Lys	Lys	Arg	Asn	Arg	Ile	Arg	Gln
			260					265					270		
Glu	Asn	Asp	Met	Val	Asp	Ser	Ala	Pro	Gln	Trp	Glu	Ala	Val	Leu	Arg
		275					280					285			
Arg	Gln	Lys	Glu	Lys	Asn	Gln	Ala	Asp	Pro	Asn	Asn	Arg	Arg	Ser	Arg
		290				295					300				
His	Arg	Ser	Arg	Ser	Arg	Ser	Pro	Asp	Ile	Gln	Ala	Lys	Glu	Glu	Leu
305					310					315				320	
Trp	Lys	His	Ile	Gln	Lys	Glu	Leu	Val	Asp	Pro	Ser	Gly	Leu	Ser	Glu
			325						330					335	
Glu	Gln	Leu	Lys	Glu	Ile	Pro	Tyr	Thr	Lys	Ile	Glu				
			340						345						

&lt;210&gt; 3861

&lt;211&gt; 748

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3861

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60

gccaccatgt cgggagacaa acttctgagc gaactcgggtt ataagctggg ccgcacaatt

120

ggagagggca gctactccaa ggtgaagggtg gccacatcca agaagtacaa gggtagcgtg

180

gccatcaagg tgggtggaccg gcggcgagcg ccccgaggact tcgtcaacaa gttcctgccc

240

cgagagctgt ccactctgcg gggcggtcga caccgcaca tcgtgcacgt cttcgagttc

300

atcgaggtgt gcaacgggaa actgtacatc gtgatggaag cggccgccac cgacctgctg

360

caagccgtgc agcgcaacgg gcgcatcccc ggagttcagg cgcgcgacct ctttgcgcag  
 420  
 atcgccggcg ccgtgcgcta cctgcacgat catcacctgg tgcaccgcga cctcaagtgc  
 480  
 gaaaacgtgc tgctgagccc ggacgagcgc cgcgtcaagc tcaccgactt cggcttcggc  
 540  
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 600  
 acccgagtca tgcatttctt gagcacctac tgtctgccag gccccagagc tcatggcgaa  
 660  
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 720  
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 748

<210> 3862

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3862

Met	Ser	Gly	Asp	Lys	Leu	Leu	Ser	Glu	Leu	Gly	Tyr	Lys	Leu	Gly	Arg
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Thr	Ile	Gly	Glu	Gly	Ser	Tyr	Ser	Lys	Val	Lys	Val	Ala	Thr	Ser	Lys
		20						25					30		
Lys	Tyr	Lys	Gly	Thr	Val	Ala	Ile	Lys	Val	Val	Asp	Arg	Arg	Arg	Ala
		35					40				45				
Pro	Pro	Asp	Phe	Val	Asn	Lys	Phe	Leu	Pro	Arg	Glu	Leu	Ser	Ile	Leu
		50				55					60				
Arg	Gly	Val	Arg	His	Pro	His	Ile	Val	His	Val	Phe	Glu	Phe	Ile	Glu
65					70					75					80
Val	Cys	Asn	Gly	Lys	Leu	Tyr	Ile	Val	Met	Glu	Ala	Ala	Ala	Thr	Asp
			85					90						95	
Leu	Leu	Gln	Ala	Val	Gln	Arg	Asn	Gly	Arg	Ile	Pro	Gly	Val	Gln	Ala
		100						105					110		
Arg	Asp	Leu	Phe	Ala	Gln	Ile	Ala	Gly	Ala	Val	Arg	Tyr	Leu	His	Asp
		115					120					125			
His	His	Leu	Val	His	Arg	Asp	Leu	Lys	Cys	Glu	Asn	Val	Leu	Leu	Ser
		130				135					140				
Pro	Asp	Glu	Arg	Arg	Val	Lys	Leu	Thr	Asp	Phe	Gly	Phe	Gly	Arg	Gln
145					150					155					160
Ala	His	Gly	Tyr	Pro	Asp	Leu	Ser	Thr	Thr	Tyr	Cys	Gly	Ser	Ala	Val
			165					170						175	
Arg	Val	Thr	Arg	Val	Met	His	Phe	Leu	Ser	Thr	Tyr	Cys	Leu	Pro	Gly
		180					185						190		
Pro	Arg	Ala	His	Gly	Glu	Glu	Thr	Trp	Ala	His	Pro	Cys	Arg	Lys	Arg
		195					200					205			
Asp	Asn														
		210													

<210> 3863

<211> 341

<212> DNA

<213> Homo sapiens



&lt;400&gt; 3863

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 ctcactttga ggcttcctat tttctttaat cctgggggtac agctcccacc tggacacttc  
 120  
 agttttgctc tcagttggga ctctgggaaa aaaactgtgt ggctgatctc cagcaggttc  
 180  
 ttctggtcga ggctccccga gaaccatctg gccatgggct ggccagccgag ttctcgagc  
 240  
 gtccaggctg acggtacatt ccaggctagc catctatca taatcgaatc tgagtagatt  
 300  
 tttatcaatc gcttgggaca agccattgaa ttttcggaga g  
 341

&lt;210&gt; 3864

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3864

Met	Ala	Cys	Pro	Lys	Arg	Leu	Ile	Lys	Ile	Tyr	Ser	Asp	Ser	Ile	Met
1				5				10						15	
Ile	Gly	Trp	Leu	Ala	Trp	Asn	Val	Pro	Ser	Ala	Trp	Thr	Leu	Arg	Glu
			20					25					30		
Leu	Gly	Cys	Gln	Pro	Met	Ala	Arg	Trp	Phe	Ser	Gly	Ser	Leu	Asp	Gln
			35				40					45			
Lys	Asn	Leu	Val	Glu	Ile	Ser	His	Thr	Val	Phe	Phe	Pro	Glu	Ser	Gln
	50					55				60					
Leu	Arg	Ala	Lys	Leu	Lys	Cys	Pro	Gly	Gly	Ser	Cys	Thr	Pro	Gly	Leu
65				70					75					80	
Lys	Lys	Ile	Gly	Ser	Leu	Lys	Val	Ser	Cys	Glu	Glu	Phe	Leu	Leu	Met
			85					90						95	
Gly	Leu	Arg	Tyr	Gln	His	Leu	Asp	Pro	Pro	Ser	Arg				
			100					105							

&lt;210&gt; 3865

&lt;211&gt; 492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3865

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 60  
 aatcaggaat tgacgataag cttactacat tttgaaatta tctgactttc ctcatgaaat  
 120  
 gagacctatg tgaagccac ttaattttct gaaacttcac atcatgtacc ttcattgtaa  
 180  
 tattctgaca cttgtttcat gcagccatac cagtcacaac tttaaatttt tagtcagact  
 240  
 ttgctcacia gggttcagga taattaatac aaatggtttg ggccagccat cacacagcag  
 300  
 tctctatttt acttcactac aactacagct ttcattcttc attacattac tttttctgag  
 360

tagtctgggt caaatagtagt aaactgaata ttccttaacc aaaatgcttg gaagtaggcc  
 420  
 gggagcagcg gctcaccctt gtaatcccag catcttgagg ggccaaagca gacagatcac  
 480  
 tcaaggtcag ca  
 492

<210> 3866

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3866

Met	Tyr	Leu	His	Cys	Asn	Ile	Leu	Thr	Leu	Val	Ser	Cys	Ser	His	Thr
1				5				10					15		
Ser	His	Asn	Phe	Lys	Phe	Leu	Val	Arg	Leu	Cys	Ser	Gln	Gly	Phe	Arg
			20					25				30			
Ile	Ile	Asn	Thr	Asn	Gly	Leu	Gly	Gln	Pro	Ser	His	Ser	Ser	Leu	Leu
		35				40					45				
Phe	Thr	Ser	Leu	Gln	Leu	Gln	Leu	Ser	Phe	Phe	Ile	Thr	Leu	Leu	Phe
	50				55				60						
Leu	Ser	Ser	Leu	Gly	Gln	Ile	Val	Gln	Thr	Glu	Tyr	Ser	Leu	Thr	Lys
65				70				75					80		
Met	Leu	Gly	Ser	Arg	Pro	Gly	Ala	Ala	Ala	His	Pro	Cys	Asn	Pro	Ser
			85			90					95				
Ile	Leu	Gly	Gly	Gln	Ser	Arg	Gln	Ile	Thr	Gln	Gly	Gln			
		100				105									

<210> 3867

<211> 1032

<212> DNA

<213> Homo sapiens

<400> 3867

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 gagcagcatc agactgagat cagggatctc caggaccagc tctcagaaat gcacgatgaa  
 120  
 ctggacagtg caaagcgatc ggaggacagg gagaaggagg ctctgattga ggagctctta  
 180  
 caggcaaaac aggatcttca agatctgctg attgccaaag aggagcaaga agacctcttg  
 240  
 agaaagcgag agcgtgaact caccgccctg aaggagagccc tgaaagaaga ggtttccagc  
 300  
 catgatcagg agatggacaa gctgaaggag caatatgatg ctgagttgca ggccctgagg  
 360  
 gagagtgtgg aagaagcaac caagaatgtc gaggtcttgg cgagcaggag caacacttca  
 420  
 gagcaagacc aggcggggac tgaaatgcgc gtgaagcttc tgcaggagga gaatgagaag  
 480  
 ctgcagggaa gaagcgaaga gctggagcgg agagttgctc agcttcaaag gcagatcgag  
 540  
 gacctgaaag gcgatgaagc caaggcgaag gaaacgctga agaagtacga gggagaaata  
 600

cgacagttag aggaggccct tgtgcacgcc agaaaggaag aaaaagaagc tgtgtcagcc  
 660  
 agaagggccc tggagaatga actggaggct gctcaggga atctgagtca gactaccag  
 720  
 gagcagaagc agttgtctga gaagctcaaa gaggagagtg agcagaagga gcagctaaga  
 780  
 aggttgaaga acgagatgga gaatgagcgg tggcacctgg gcaaaacat tgagaaactg  
 840  
 cagaaggaga tggcagacat tgttgaggcc tcccgtaacct caaccctgga gctccagaac  
 900  
 cagctggatg agtataagga gaaaaaccgc agggagctcg cagaaatgca aagacagttg  
 960  
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 1020  
 atgcgtctga tg  
 1032

<210> 3868

<211> 344

<212> PRT

<213> Homo sapiens

<400> 3868

Thr	Arg	Glu	Gly	Glu	Leu	Arg	Lys	Asn	Leu	Glu	Glu	Leu	Phe	Gln	Val
1				5				10						15	
Lys	Met	Glu	Arg	Glu	Gln	His	Gln	Thr	Glu	Ile	Arg	Asp	Leu	Gln	Asp
		20					25					30			
Gln	Leu	Ser	Glu	Met	His	Asp	Glu	Leu	Asp	Ser	Ala	Lys	Arg	Ser	Glu
		35				40					45				
Asp	Arg	Glu	Lys	Gly	Ala	Leu	Ile	Glu	Glu	Leu	Leu	Gln	Ala	Lys	Gln
	50					55				60					
Asp	Leu	Gln	Asp	Leu	Leu	Ile	Ala	Lys	Glu	Glu	Gln	Glu	Asp	Leu	Leu
65				70					75					80	
Arg	Lys	Arg	Glu	Arg	Glu	Leu	Thr	Ala	Leu	Lys	Gly	Ala	Leu	Lys	Glu
			85					90					95		
Glu	Val	Ser	Ser	His	Asp	Gln	Glu	Met	Asp	Lys	Leu	Lys	Glu	Gln	Tyr
		100					105					110			
Asp	Ala	Glu	Leu	Gln	Ala	Leu	Arg	Glu	Ser	Val	Glu	Glu	Ala	Thr	Lys
		115					120					125			
Asn	Val	Glu	Val	Leu	Ala	Ser	Arg	Ser	Asn	Thr	Ser	Glu	Gln	Asp	Gln
	130					135					140				
Ala	Gly	Thr	Glu	Met	Arg	Val	Lys	Leu	Leu	Gln	Glu	Glu	Asn	Glu	Lys
145				150					155					160	
Leu	Gln	Gly	Arg	Ser	Glu	Glu	Leu	Glu	Arg	Arg	Val	Ala	Gln	Leu	Gln
			165					170					175		
Arg	Gln	Ile	Glu	Asp	Leu	Lys	Gly	Asp	Glu	Ala	Lys	Ala	Lys	Glu	Thr
		180					185					190			
Leu	Lys	Lys	Tyr	Glu	Gly	Glu	Ile	Arg	Gln	Leu	Glu	Glu	Ala	Leu	Val
	195					200						205			
His	Ala	Arg	Lys	Glu	Glu	Lys	Glu	Ala	Val	Ser	Ala	Arg	Arg	Ala	Leu
	210					215					220				
Glu	Asn	Glu	Leu	Glu	Ala	Ala	Gln	Gly	Asn	Leu	Ser	Gln	Thr	Thr	Gln
225				230					235					240	
Glu	Gln	Lys	Gln	Leu	Ser	Glu	Lys	Leu	Lys	Glu	Glu	Ser	Glu	Gln	Lys

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<400> 3869
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120
tgatgcacac acattccaga aatgcagagg tatgctgctg ccacggggta ggggtgcggg
180
aggcggcctg gcctcatggc cgcagaccgt gccccagccc gggcctggca ggtagctggc
240
cactgataaa tgccactggg atcctaggag aagctgggga ccatgcgtga ggtactgaag
300
gggaccatgg tggatggcat cctgggcact ttgtagcttg tctgaggga aggcctctgc
360
tgccatagaa aagctggaca catgtcacc tggggccctg acatcctaaa atgccccact
420
gactaccagt cactaggaga aaggctctcg gctatgccct tcccagtgat gcttgcccca
480
gagtgactgg tcacaggtgg gggacagggt tgctccagaa accgtaggcc tttcttgtct
540
ggccccctaa agaggacca agatcaggaa aactccccag tttaaaaaaa tatctgtcca
600
tctgtatata aaatacctat tattagctgg agttgcacac atgcaggacc aggagagact
660
gcctgagggt ctgcctggac cgaaggaggc ctgcctcaca gcacctctgt gaggggactg
720
gtgctcctgg gaagtcactt ctcttggtga ccgagctgac accccctcca cttggaaagc
780
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840
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900
caccaccca tctgcctctg gccccagtg aagtcagaag aggcaggagc cccgcaggct
960
gtgagcctgg cgcaggtcgg ctgacagcga gcttctcctc tgccctgggtg tagagcggac
1020

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gctctcggca gectgcacgg cccggctcag ggccttggtg agctcctcta ggtcgcccag  
 1080  
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 1140  
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 1200  
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 1226

<210> 3870

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3870

Met Ala Ala Glu Ala Phe Pro Ser Asp Lys Leu Gln Ser Ala Gln Asp  
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 20 25 30  
 Leu Leu Gly Ser Gln Trp His Leu Ser Val Ala Ser Tyr Leu Pro Gly  
 35 40 45  
 Pro Gly Trp Gly Thr Val Cys Gly His Glu Ala Arg Pro Pro Pro Ala  
 50 55 60  
 Pro Leu Pro Arg Gly Ser Ser Ile Pro Leu His Phe Trp Asn Val Cys  
 65 70 75 80  
 Ala Ser Met Met Phe Val Tyr Leu Arg His Leu Lys Ile Tyr Phe Arg  
 85 90 95  
 Tyr Glu Gly Lys  
 100

<210> 3871

<211> 473

<212> DNA

<213> Homo sapiens

<400> 3871

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 tgcctcacat ttcccagtgc ttctctgca cccctccatt ggagtaaaaa ccacagtttg  
 120  
 tgggatgggt gagttgacag ctctgaatcc cagaaacctt aattttggct tatcttttga  
 180  
 taggttgagg gaaaatacaa agatgacatc gttgatctcc gccttgatat tgaacgtcgt  
 240  
 aaaaaacata aggagagaga tcttaaacga ggtaaatcga gagaatcagt ggattcccga  
 300  
 gactccagtc actcaaggga aagggtcagct gaaaaaacag agaaaactca taaaggatca  
 360  
 aagaaacaga agaaagacct ctgagagccg agacaagctg ggagcgaaag gagattttcc  
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 473

<210> 3872

<211> 66  
 <212> PRT  
 <213> Homo sapiens

<400> 3872  
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 20 25 30  
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 35 40 45  
 Ala Glu Lys Thr Glu Lys Thr His Lys Gly Ser Lys Lys Gln Lys Lys  
 50 55 60  
 Asp Leu  
 65

<210> 3873  
 <211> 869  
 <212> DNA  
 <213> Homo sapiens

<400> 3873  
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 180  
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 240  
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 300  
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 360  
 gtcagtgcag cggaccccgga attctgtcac ccgttggtgcc agtgccccaa gtgtgccccaa  
 420  
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 660  
 cccaataaga aggacctcag tggaaacacg cccctcattt acgcctgctc cggtagccat  
 720  
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 780  
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<210> 3874

<211> 289  
 <212> PRT  
 <213> Homo sapiens

<400> 3874

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Gly Asp Pro Leu Lys Cys Ala Leu Asn Ser Lys Ile Leu Ser Val Met
          20           25           30
Glu Ala Tyr His Leu Ser Phe Glu Arg Arg Gln Lys Ser Ser Glu Ala
          35           40           45
Pro Val Gln Ser Pro Gln Arg Ser Val Asp Ser Ile Ser Gln Glu Ser
          50           55           60
Ser Thr Ser Ser Phe Ser Ser Met Ser Ala Gly Ser Arg Gln Glu Glu
65           70           75           80
Thr Lys Lys Asp Tyr Arg Glu Val Glu Lys Leu Leu Arg Ala Val Ala
          85           90           95
Asp Gly Asp Leu Glu Met Val Arg Tyr Leu Leu Glu Trp Thr Glu Glu
          100          105          110
Asp Leu Glu Asp Ala Glu Asp Thr Val Ser Ala Ala Asp Pro Glu Phe
          115          120          125
Cys His Pro Leu Cys Gln Cys Pro Lys Cys Ala Pro Ala Gln Lys Arg
          130          135          140
Leu Ala Lys Val Pro Ala Ser Gly Leu Gly Val Asn Val Thr Ser Gln
145          150          155          160
Asp Gly Ser Ser Pro Leu His Val Ala Ala Leu His Gly Arg Ala Asp
          165          170          175
Leu Ile Arg Leu Leu Leu Lys His Gly Ala Asn Ala Gly Ala Arg Asn
          180          185          190
Ala Asp Gln Ala Val Pro Leu His Leu Ala Cys Gln Gln Gly His Phe
          195          200          205
Gln Val Val Lys Cys Leu Leu Asp Ser Asn Ala Lys Pro Asn Lys Lys
          210          215          220
Asp Leu Ser Gly Asn Thr Pro Leu Ile Tyr Ala Cys Ser Gly Gly His
225          230          235          240Glu Leu
Val Ala Leu Leu Leu Gln His Gly Ala Ser Ile Asn Ala
          245          250          255
Leu Thr Ile Arg Gly Asn Thr Ala Leu His Glu Ala Val Ile Glu Lys
          260          265          270
His Val Phe Val Val Glu Leu Leu Leu Leu His Gly Ala Ser Val Arg
          275          280          285
Cys

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<210> 3875  
 <211> 2640  
 <212> DNA  
 <213> Homo sapiens

<400> 3875

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120

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240  
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tctgcggtatg agccccagtg ccttttgcta ctcttgacg cttttggcct gctggagagc  
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cgcttgatc cctacctgcg tagcctagag ctgctggaga aatggactcg cctgggcttg  
420  
ctgatgggca ctggtgctca ggggctgcga gaagaagtcc acactatgtt gcgcggagtc  
480  
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720  
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1080  
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1680  
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1740



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&lt;210&gt; 3876

&lt;211&gt; 824

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3876

Met	Ala	Ala	Ala	Val	Val	Ala	Glu	Gly	Asp	Ser	Asp	Ser	Arg	Pro
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Gly	Gln	Glu	Leu	Leu	Val	Ala	Trp	Asn	Thr	Val	Ser	Thr	Gly	Leu
		20						25				30		Val
Pro	Pro	Ala	Ala	Leu	Gly	Leu	Val	Ser	Ser	Arg	Thr	Ser	Gly	Ala
		35				40						45		Val
Pro	Pro	Lys	Glu	Glu	Glu	Leu	Arg	Ala	Ala	Val	Glu	Val	Leu	Arg
		50				55					60			Gly
His	Gly	Leu	His	Ser	Val	Leu	Glu	Glu	Trp	Phe	Val	Glu	Val	Leu
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Asn	Asp	Leu	Gln	Ala	Asn	Ile	Ser	Pro	Glu	Phe	Trp	Asn	Ala	Ile
			85						90					95
Gln	Cys	Glu	Asn	Ser	Ala	Asp	Glu	Pro	Gln	Cys	Leu	Leu	Leu	Leu
		100						105				110		
Asp	Ala	Phe	Gly	Leu	Leu	Glu	Ser	Arg	Leu	Asp	Pro	Tyr	Leu	Arg
		115						120				125		Ser
Leu	Glu	Leu	Leu	Glu	Lys	Trp	Thr	Arg	Leu	Gly	Leu	Leu	Met	Gly
														Thr

130		135		140
Gly Ala Gln Gly Leu Arg Glu Glu Val His Thr Met Leu Arg Gly Val				
145		150		155
Leu Phe Phe Ser Thr Pro Arg Thr Phe Gln Glu Met Ile Gln Arg Leu				160
	165		170	175
Tyr Gly Cys Phe Leu Arg Val Tyr Met Gln Ser Lys Arg Lys Gly Glu				
	180		185	190
Gly Gly Thr Asp Pro Glu Leu Glu Gly Glu Leu Asp Ser Arg Tyr Ala				
	195		200	205
Arg Arg Arg Tyr Tyr Arg Leu Leu Gln Ser Pro Leu Cys Ala Gly Cys				
	210		215	220
Ser Ser Asp Lys Gln Gln Cys Trp Cys Arg Gln Ala Leu Glu Gln Phe				240
225		230		235
His Gln Leu Ser Gln Val Leu His Arg Leu Ser Leu Leu Glu Arg Val				
	245		250	255
Ser Ala Glu Ala Val Thr Thr Thr Leu His Gln Val Thr Arg Glu Arg				
	260		265	270
Met Glu Asp Arg Cys Arg Gly Glu Tyr Glu Arg Ser Phe Leu Arg Glu				
	275		280	285
Phe His Arg Trp Ile Glu Arg Val Val Gly Trp Leu Gly Lys Val Phe				
	290		295	300
Leu Gln Asp Gly Pro Ala Arg Pro Ala Ser Pro Glu Ala Gly Asn Thr				
305		310		315
Leu Arg Arg Trp Arg Cys His Val Gln Arg Phe Phe Tyr Arg Ile Tyr				
	325		330	335
Ala Ser Leu Arg Ile Glu Glu Leu Phe Ser Ile Val Arg Asp Phe Pro				
	340		345	350
Asp Ser Arg Pro Ala Ile Glu Asp Leu Lys Tyr Cys Leu Glu Arg Thr				
	355		360	365
Asp Gln Arg Gln Gln Leu Leu Val Ser Leu Lys Ala Ala Leu Glu Thr				
	370		375	380
Arg Leu Leu His Pro Gly Val Asn Thr Cys Asp Ile Ile Thr Leu Tyr				
385		390		395
Ile Ser Ala Ile Lys Ala Leu Arg Val Leu Asp Pro Ser Met Val Ile				
	405		410	415
Leu Glu Val Ala Cys Glu Pro Ile Arg Arg Tyr Leu Arg Thr Arg Glu				
	420		425	430
Asp Thr Val Arg Gln Ile Val Ala Gly Leu Thr Gly Asp Ser Asp Gly				
	435		440	445
Thr Gly Asp Leu Ala Val Glu Leu Ser Lys Thr Asp Pro Ala Ser Leu				
	450		455	460
Glu Thr Gly Gln Asp Ser Glu Asp Asp Ser Gly Glu Pro Glu Asp Trp				
465		470		475
Val Pro Asp Pro Val Asp Ala Asp Pro Gly Lys Ser Ser Ser Lys Arg				
	485		490	495
Arg Ser Ser Asp Ile Ile Ser Leu Leu Val Ser Ile Tyr Gly Ser Lys				
	500		505	510
Asp Leu Phe Ile Asn Glu Tyr Arg Ser Leu Leu Ala Asp Arg Leu Leu				
	515		520	525
His Gln Phe Ser Phe Ser Pro Glu Arg Glu Ile Arg Asn Val Glu Leu				
	530		535	540
Leu Lys Leu Arg Phe Gly Glu Ala Pro Met His Phe Cys Glu Val Met				
545		550		555
Leu Lys Asp Met Ala Asp Ser Arg Arg Ile Asn Ala Asn Ile Arg Glu				560

565 570 575  
 Glu Asp Glu Lys Arg Xaa Gln Gln Arg Ser Ser His Arg Ser Gly Ser  
 580 585 590  
 Thr Leu Ser Ser Cys Pro Val Ser Ser Gly Arg Pro Ser Arg Thr Xaa  
 595 600 605  
 Lys Leu Glu Val Pro Glu Asp Ile Arg Ala Ala Leu Glu Ala Tyr Cys  
 610 615 620  
 Lys Lys Tyr Glu Gln Leu Lys Ala Met Arg Thr Leu Ser Trp Lys His  
 625 630 635 640  
 Thr Leu Gly Leu Val Thr Met Asp Val Glu Leu Ala Asp Arg Thr Leu  
 645 650 655  
 Ser Val Ala Val Thr Pro Val Gln Ala Val Ile Leu Leu Tyr Phe Gln  
 660 665 670  
 Asp Gln Ala Ser Trp Thr Leu Glu Leu Ser Lys Ala Val Lys Met  
 675 680 685  
 Pro Val Ala Leu Leu Arg Arg Met Ser Val Trp Leu Gln Gln Gly  
 690 695 700  
 Val Leu Arg Glu Xaa Ser Pro Pro Ala Pro Ser Leu Ser Leu Arg Arg  
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 Ser Gly Leu Arg Thr Gly Xaa Asn Met Val Leu Ile Asp Ser Asp Asp  
 725 730 735  
 Glu Ser Asp Ser Gly Met Ala Ser Gln Ala Asp Gln Lys Glu Glu Glu  
 740 745 750  
 Leu Leu Leu Phe Trp Thr Tyr Ile Gln Ala Met Leu Thr Asn Leu Glu  
 755 760 765  
 Ser Leu Ser Leu Asp Arg Ile Tyr Asn Met Leu Arg Met Phe Val Val  
 770 775 780  
 Thr Gly Pro Ala Leu Ala Glu Ile Asp Leu Gln Glu Leu Gln Gly Tyr  
 785 790 795 800  
 Leu Gln Lys Lys Val Arg Asp Gln Gln Leu Val Tyr Ser Ala Gly Val  
 805 810 815  
 Tyr Arg Leu Pro Lys Asn Cys Ser  
 820

&lt;210&gt; 3877

&lt;211&gt; 1112

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3877

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 1020  
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 1080  
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 1112

<210> 3878

<211> 370

<212> PRT

<213> Homo sapiens

<400> 3878

Xaa	Asn	Ser	Met	Lys	His	Glu	Asp	Pro	Ser	Ile	Ile	Ser	Met	Glu	Asp
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Gly	Ser	Pro	Tyr	Val	Asn	Gly	Ser	Leu	Gly	Glu	Val	Thr	Pro	Cys	Gln
			20					25					30		
His	Ala	Lys	Lys	Ala	Asn	Gly	Pro	Asn	Tyr	Ile	Gln	Pro	Gln	Lys	Arg
			35				40					45			
Gln	Thr	Thr	Phe	Glu	Ser	Gln	Asp	Arg	Lys	Ala	Val	Ser	Pro	Ser	Ser
	50					55					60				
Ser	Glu	Lys	Arg	Ser	Lys	Asn	Pro	Ile	Ser	Arg	Pro	Leu	Glu	Gly	Lys
65					70				75					80	
Lys	Ser	Leu	Ser	Leu	Ser	Ala	Lys	Thr	His	Asn	Ile	Gly	Phe	Asp	Lys
			85					90					95		
Asp	Ser	Cys	His	Ser	Thr	Thr	Lys	Thr	Glu	Ala	Ser	Gln	Glu	Glu	Arg
			100					105					110		
Ser	Asp	Ser	Ser	Gly	Leu	Thr	Ser	Leu	Lys	Lys	Ser	Pro	Lys	Val	Ser
			115				120					125			
Ser	Lys	Asp	Thr	Arg	Glu	Ile	Lys	Thr	Asp	Phe	Ser	Leu	Ser	Ile	Ser
	130					135				140					
Asn	Ser	Ser	Asp	Val	Ser	Ala	Lys	Asp	Lys	His	Ala	Glu	Asp	Asn	Glu
145				150						155				160	
Lys	Arg	Leu	Ala	Ala	Leu	Glu	Ala	Arg	Gln	Lys	Ala	Lys	Glu	Val	Gln
			165					170					175		
Lys	Lys	Leu	Val	His	Asn	Ala	Leu	Ala	Asn	Leu	Asp	Gly	His	Pro	Glu

180 185 190  
 Asp Lys Pro Thr His Ile Ile Phe Gly Ser Asp Ser Glu Cys Glu Thr  
 195 200 205  
 Glu Glu Thr Ser Thr Gln Glu Gln Ser His Pro Gly Glu Glu Trp Val  
 210 215 220  
 Lys Glu Ser Met Gly Lys Thr Ser Gly Lys Leu Phe Asp Ser Ser Asp  
 225 230 235 240  
 Asp Glu Glu Ser Asp Ser Glu Asp Asp Ser Asn Arg Phe Lys Ile Lys  
 245 250 255  
 Pro Gln Phe Glu Gly Arg Ala Gly Gln Lys Leu Met Asp Leu Gln Ser  
 260 265 270  
 His Phe Gly Thr Asp Asp Arg Phe Arg Met Asp Ser Arg Phe Leu Glu  
 275 280 285  
 Thr Asp Ser Glu Glu Glu Gln Glu Glu Val Asn Glu Lys Lys Thr Ala  
 290 295 300  
 Glu Glu Glu Glu Leu Ala Glu Glu Lys Lys Lys Ala Leu Asn Val Val  
 305 310 315 320  
 Gln Ser Val Leu Gln Ile Asn Leu Ser Asn Ser Thr Asn Arg Gly Ser  
 325 330 335  
 Val Ala Ala Lys Lys Phe Lys Asp Ile Ile His Tyr Asp Pro Thr Lys  
 340 345 350  
 Gln Asp His Ala Thr Tyr Glu Arg Lys Arg Asp Asp Lys Pro Lys Glu  
 355 360 365  
 Ser Lys  
 370

&lt;210&gt; 3879

&lt;211&gt; 2769

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3879

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2280

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 2769

&lt;210&gt; 3880

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3880

Xaa	Met	Thr	Thr	Phe	Ser	Gln	Leu	Arg	Asp	Leu	His	Leu	Glu	Gly	Asn
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Phe	Leu	His	Arg	Leu	Pro	Ser	Glu	Val	Ser	Ala	Leu	Gln	His	Leu	Lys
			20					25					30		
Ala	Ile	Asp	Leu	Ser	Arg	Asn	Gln	Phe	Gln	Asp	Phe	Pro	Glu	Gln	Leu
		35					40						45		
Thr	Ala	Leu	Pro	Ala	Leu	Glu	Thr	Ile	Asn	Leu	Glu	Glu	Asn	Glu	Ile
		50				55					60				
Val	Asp	Val	Pro	Val	Glu	Lys	Leu	Ala	Ala	Met	Pro	Ala	Leu	Arg	Ser
65					70				75					80	
Ile	Asn	Leu	Arg	Phe	Asn	Pro	Leu	Asn	Ala	Glu	Val	Arg	Val	Ile	Ala
			85					90						95	
Pro	Pro	Leu	Ile	Lys	Phe	Asp	Met	Leu	Met	Ser	Pro	Glu	Gly	Ala	Arg
			100					105						110	
Ala	Pro	Leu	Pro												
			115												

&lt;210&gt; 3881

&lt;211&gt; 1393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3881

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 1393

&lt;210&gt; 3882

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3882

Asp Leu Gly Pro Trp Ser Gln Tyr Ala Pro Pro Glu Trp Ser Gln Gly  
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 20 25 30  
 Gln Met Pro Ser Leu Asn Trp Pro Glu Ala Leu Pro Pro Pro Pro Pro



35 40 45  
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 50 55 60  
 Ser Ser Glu Pro Glu Glu Trp Cys Pro Pro Met Pro Glu Arg Ser His  
 65 70 75 80  
 Leu Thr Glu Pro Ser Ser Ser Gly Gly Trp Leu Val Thr Pro Ser Arg  
 85 90 95  
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&lt;210&gt; 3883

&lt;211&gt; 943

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3883

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<210> 3884

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3884

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3886

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 Pro Tyr His His Xaa Ser Gly His Asn Asp Gln Lys Ile Arg Phe Trp  
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<212> DNA

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<211> 1230

<212> PRT

<213> Homo sapiens

<400> 3888

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3035

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Lys Ile Asp Leu Arg Pro Val Leu Gly Glu Gly Val Pro Ile Leu Ala
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      850              855              860
Phe Ser Ser Pro Ser Glu Glu Val Lys Ser Ala Ala Ser Tyr Ala Leu
  865              870              875              880
Gly Ser Ile Ser Val Gly Asn Leu Pro Glu Tyr Leu Pro Phe Val Leu
      885              890              895
Gln Glu Ile Thr Ser Gln Pro Lys Arg Gln Tyr Leu Leu Leu His Ser
      900              905              910
Leu Lys Glu Ile Ile Ser Ser Ala Ser Val Val Gly Leu Lys Pro Tyr
      915              920              925
Val Glu Asn Ile Trp Ala Leu Leu Leu Lys His Cys Glu Cys Ala Glu
      930              935              940
Glu Gly Thr Arg Asn Val Val Ala Glu Cys Leu Gly Lys Leu Thr Leu
  945              950              955              960
Ile Asp Pro Glu Thr Leu Leu Pro Arg Leu Lys Gly Tyr Leu Ile Ser
      965              970              975
Gly Ser Ser Tyr Ala Arg Ser Ser Val Val Thr Ala Val Lys Phe Thr
      980              985              990
Ile Ser Asp His Pro Gln Pro Ile Asp Pro Leu Leu Lys Asn Cys Ile
      995              1000              1005
Gly Asp Phe Leu Lys Thr Leu Glu Asp Pro Asp Leu Asn Val Arg Arg
      1010              1015              1020
Val Ala Leu Val Thr Phe Asn Ser Ala Ala His Asn Lys Pro Ser Leu

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1025                      1030                      1035                      1040  
 Ile Arg Asp Leu Leu Asp Thr Val Leu Pro His Leu Tyr Asn Glu Thr  
                                  1045                      1050                      1055  
 Lys Val Arg Lys Glu Leu Ile Arg Glu Val Glu Met Gly Pro Phe Lys  
                                  1060                      1065                      1070  
 His Thr Val Asp Asp Gly Leu Asp Ile Arg Lys Ala Ala Phe Glu Cys  
                                  1075                      1080                      1085  
 Met Tyr Thr Leu Leu Asp Ser Cys Leu Asp Arg Leu Asp Ile Phe Glu  
                                  1090                      1095                      1100  
 Phe Leu Asn His Val Glu Asp Gly Leu Lys Asp His Tyr Asp Ile Lys  
 1105                      1110                      1115                      1120  
 Met Leu Thr Phe Leu Met Leu Val Arg Leu Ser Thr Leu Cys Pro Ser  
                                  1125                      1130                      1135  
 Ala Val Leu Gln Arg Leu Asp Arg Leu Val Glu Pro Leu Arg Ala Thr  
                                  1140                      1145                      1150  
 Cys Thr Thr Lys Val Lys Ala Asn Ser Val Lys Gln Glu Phe Glu Lys  
                                  1155                      1160                      1165  
 Gln Asp Glu Leu Lys Arg Ser Ala Met Arg Ala Val Ala Ala Leu Leu  
                                  1170                      1175                      1180  
 Thr Ile Pro Glu Ala Glu Lys Ser Pro Leu Met Ser Glu Phe Gln Ser  
 1185                      1190                      1195                      1200  
 Gln Ile Ser Ser Asn Pro Glu Leu Ala Ala Ile Phe Glu Ser Ile Gln  
                                  1205                      1210                      1215  
 Lys Asp Ser Ser Ser Thr Asn Leu Glu Ser Met Asp Thr Ser  
                                  1220                      1225                      1230

&lt;210&gt; 3889

&lt;211&gt; 556

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3889

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 60  
 ccagtcctga cggatgagca ggtcccgaat ccaggccatg aagcccatga ccaaggagga  
 120  
 tgggatgccc ggcagagcat catccgcaag gtggtggacc ctgagacggg gcgcaccagg  
 180  
 cttattaagg gagatggcga ggtcctagag gaaatcgtaa ccaaagaacg acacagagag  
 240  
 atcaacaagc aagccaccgg aggggactgc ctggccttcc agatgcgagc tgggttgctt  
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 420  
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 556

&lt;210&gt; 3890

<211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 3890  
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 Glu Glu Asp Gly Pro Val Leu Thr Asp Glu Gln Val Pro Asn Pro Gly  
 20 25 30  
 His Glu Ala His Asp Gln Gly Gly Trp Asp Ala Arg Gln Ser Ile Ile  
 35 40 45  
 Arg Lys Val Val Asp Pro Glu Thr Gly Arg Thr Arg Leu Ile Lys Gly  
 50 55 60  
 Asp Gly Glu Val Leu Glu Glu Ile Val Thr Lys Glu Arg His Arg Glu  
 65 70 75 80  
 Ile Asn Lys Gln Ala Thr Arg Gly Asp Cys Leu Ala Phe Gln Met Arg  
 85 90 95  
 Ala Gly Leu Leu Pro  
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<210> 3891  
 <211> 1687  
 <212> DNA  
 <213> Homo sapiens

<400> 3891  
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 120  
 acaggccacg gcactgagag tagtggctct ggccctctttg ccctgtgcac cctggatggg  
 180  
 aactgaagc tcatggaaga aatggaagaa gcagacaagc tgctgtggtc agtgcagggt  
 240  
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 300  
 gttgcatgcg cctgggatgg acagacatat atcattgatc acaaccgcac cgtcgtccgc  
 360  
 ttccaagtgg atgaaaatat ccgtgccttc tgtgcaggcc tgtacgcctg caaagagggc  
 420  
 cgcaacagcc cctgcctcgt atatgtcact ttcaaccaga agatctatgt gtactgggag  
 480  
 gtgcagctgg agcggatgga gtctaccaat ctggtgaaac tgctggagac caagccgagt  
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 accacagcct gctgcaggag ctgggcgtgg atcctgacga cctccctgtg actcgtgccc  
 600  
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 660  
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 720  
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 780  
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 840

tcgcagtctt ttccgtgaaa gaagagacaa gttgaccctc tgcccatttc cttatggacc  
 900  
 tcacccatca tgccagcagg gtcataggac ctggccttgt tccaaatcat ctgggacatg  
 960  
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 1020  
 ataaggaaac caggcttttag gcccagggga gcagtggagg taagggtccc accccatctt  
 1080  
 aagctctgtc ttccgtggca caattccaag ttcttgacgt tagtaattgt taaaggaatg  
 1140  
 gcaaaactgtt ttgttttgaa ggatctttct acagtctggg cttacccatg ttcctagcaa  
 1200  
 ccctgagatg attttcttcc atttaccaaa gcagccgggt cagtgtcttc tcacgttgcc  
 1260  
 gtattcttca ggtattagtc agcttcagaa gccctgctcc catttttcca cccacccatt  
 1320  
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 1380  
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 1440  
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 1500  
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 1560  
 gctctcagtg taggtaagta ttgttttggt agtcatatgt gcatgtgtgt actgagtgcc  
 1620  
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 1680  
 caaatc  
 1687

&lt;210&gt; 3892

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3892

Val	Arg	Val	Leu	Asn	Ile	Trp	Pro	Tyr	Pro	Gln	Gln	Glu	Cys	Leu	His
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Ser	Pro	Asn	Trp	Gln	His	Gln	Thr	Gly	His	Gly	Thr	Glu	Ser	Ser	Gly
		20						25				30			
Ser	Gly	Leu	Phe	Ala	Leu	Cys	Thr	Leu	Asp	Gly	Thr	Leu	Lys	Leu	Met
		35					40				45				
Glu	Glu	Met	Glu	Glu	Ala	Asp	Lys	Leu	Leu	Trp	Ser	Val	Gln	Val	Asp
		50				55				60					
His	Gln	Leu	Phe	Ala	Leu	Glu	Lys	Leu	Asp	Val	Thr	Gly	Asn	Gly	His
65				70					75					80	
Glu	Glu	Val	Val	Ala	Cys	Ala	Trp	Asp	Gly	Gln	Thr	Tyr	Ile	Ile	Asp
			85					90					95		
His	Asn	Arg	Thr	Val	Val	Arg	Phe	Gln	Val	Asp	Glu	Asn	Ile	Arg	Ala
			100					105				110			
Phe	Cys	Ala	Gly	Leu	Tyr	Ala	Cys	Lys	Glu	Gly	Arg	Asn	Ser	Pro	Cys
		115					120					125			
Leu	Val	Tyr	Val	Thr	Phe	Asn	Gln	Lys	Ile	Tyr	Val	Tyr	Trp	Glu	Val

130		135		140											
Gln	Leu	Glu	Arg	Met	Glu	Ser	Thr	Asn	Leu	Val	Lys	Leu	Leu	Glu	Thr
145		150		155		160									
Lys	Pro	Ser	Thr	Thr	Ala	Cys	Cys	Arg	Ser	Trp	Ala	Trp	Ile	Leu	Thr
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Thr	Ser	Leu													

<210> 3893  
 <211> 1591  
 <212> DNA  
 <213> Homo sapiens

<400> 3893  
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 120  
 aagagtaaag aaaatttgtgt tgtggataac atcaaagtgt gcagtaatga cactgggagt  
 180  
 ggaaaattca agtgtgtttg catcactatg agagtgcctc ggaaccaac tatcggagat  
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 300  
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 360  
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 420  
 ggtctctgcc atgatgctac acccttcac tctcagagg agaactcggc cttagaatac  
 480  
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 540  
 ggcacagtg ggctagaact ggaagcagac atcttcatag gagtgggtta ttatcagcgc  
 600  
 ttacgccata tgggtctcaga caaatttcaa gtaaggacaa ctggagcccg agacagagtc  
 660  
 accaaccagc ctattggggg aagaaatgtc caggggtggaa tccgtttttg ggagatggaa  
 720  
 cgggatgcgc ttttagctca tggtagatct tttctccttc atgaccgcct cttcaactgc  
 780  
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 840  
 gagaagccac ccccttcttg gtctgccatg cgcaacagaa aatacaactg tactctgtgt  
 900  
 agtcgcagtg acactatcga tactgtttct gtgccttatg ttttccgga ttttgtagct  
 960  
 gaactggcag ctatgaacat caaagtgaac ctggatgttg ttttaactga tgttgacctt  
 1020  
 ttggattaag aggactatca gattaaagca aaatgtaatt ttaattcaat gaagatatca  
 1080  
 ttaccagggt actcttgaga tttttcaacg gtgttagaac totcaaccaa gacctgaaaa  
 1140  
 ccaagtatgc aaggtttctg aatctctctg gtagattaac tattgacaat gattttctgt  
 1200

tatctttgtt caaaaagttc atgtcttctc aaaatatgaa atattgataa atggaagagc  
 1260  
 atacggtgac aagtctcctt tccaacccca gggtccctac accctgctct cagcaggcag  
 1320  
 tgagtgtcac acacctgtta atccatcttg agcaggacag tactatacaa atagaatgca  
 1380  
 agctgtaatg taattttata ttttcttata gccacgttga agtaaaaaca aacagggtaca  
 1440  
 gtgtttttta ccagctttat agaagtacag ttgttacata tttaatgaat acaatttgat  
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 1560  
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 1591

<210> 3894

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3894

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Lys	Leu	Gln	Tyr	Gly	Asp	Pro	Tyr	Tyr	Ser	Tyr	Leu	Asn	Leu	Asn	Thr
		20					25					30			
Gly	Glu	Ser	Phe	Val	Met	Tyr	Tyr	Lys	Ser	Lys	Glu	Asn	Cys	Val	Val
	35					40					45				
Asp	Asn	Ile	Lys	Val	Cys	Ser	Asn	Asp	Thr	Gly	Ser	Gly	Lys	Phe	Lys
	50					55				60					
Cys	Val	Cys	Ile	Thr	Met	Arg	Val	Pro	Arg	Asn	Pro	Thr	Ile	Gly	Asp
65					70					75				80	
Lys	Phe	Ala	Ser	Arg	His	Gly	Gln	Lys	Gly	Ile	Leu	Ser	Arg	Leu	Trp
			85					90						95	
Pro	Ala	Glu	Asp	Met	Pro	Phe	Thr	Glu	Ser	Gly	Met	Val	Pro	Asp	Ile
		100						105					110		
Leu	Phe	Asn	Pro	His	Gly	Phe	Pro	Ser	Arg	Met	Thr	Ile	Gly	Met	Leu
	115						120					125			
Ile	Glu	Ser	Met	Ala	Gly	Lys	Ser	Ala	Ala	Leu	His	Gly	Leu	Cys	His
	130				135						140				
Asp	Ala	Thr	Pro	Phe	Ile	Phe	Ser	Glu	Glu	Asn	Ser	Ala	Leu	Glu	Tyr
145				150						155				160	
Phe	Gly	Glu	Met	Leu	Lys	Ala	Ala	Gly	Tyr	Asn	Phe	Tyr	Gly	Thr	Glu
		165						170					175		
Arg	Leu	Tyr	Ser	Gly	Ile	Ser	Gly	Leu	Glu	Leu	Glu	Ala	Asp	Ile	Phe
		180						185					190		
Ile	Gly	Val	Val	Tyr	Tyr	Gln	Arg	Leu	Arg	His	Met	Val	Ser	Asp	Lys
	195					200					205				
Phe	Gln	Val	Arg	Thr	Thr	Gly	Ala	Arg	Asp	Arg	Val	Thr	Asn	Gln	Pro
	210					215					220				
Ile	Gly	Gly	Arg	Asn	Val	Gln	Gly	Gly	Ile	Arg	Phe	Gly	Glu	Met	Glu
225				230						235				240	
Arg	Asp	Ala	Leu	Leu	Ala	His	Gly	Thr	Ser	Phe	Leu	Leu	His	Asp	Arg
		245						250					255		
Leu	Phe	Asn	Cys	Ser	Asp	Arg	Ser	Val	Ala	His	Val	Cys	Val	Lys	Cys

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120
gtgaggagggc aagagcagcc cagcattgag agtacatctc cgatttcaag aactgatgaa
180
attagaaaaa acacctacag aacattggat agcctggagc agaccattaa acagctcgaa
240
aatacaatca gtgaaatgag tcccaaagcc ctagttgata cctcatgttc ttccaacaga
300
gattctgttg caagttcatc ccacatagcc caagaggcct ctccccgacc cttgctagtt
360
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420
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480
cccgaaccc tggacaaacc cggcaagcag tccaaactgc aggatccccg ccaatatcgt
540
caggctaatz gaagtgtctaa gaaatctggg ggggacttta agcctacttc cccctcctta
600
cctgcttcta agattccagc cctttctccc agctctggga aaagcagttc tctgccctct
660
tctagtgttg acagctctaa cctccctaatz ccacctgcta ctaaaccatc gattgcttct
720
aaccctctca gccccaaaac aggaccacct gctcactctg cctccctcat cccttctgtc
780
tctaatzggt ctttgaagtt tcagagcctc actcatacag gttaaaggta ccatctttca
840
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ccttctcctg cctcctcctg ctactgaat caaggtgcc aagggaccag gaccatccat
960
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1020
acagcaaaaag aaacctctta aaggtcaaat cctattaggc acaagtcgga gttacattta
1080
aaaaaaatta acagtctaca acaactgttt tcacaagaga atgtaacata ttgctgtatc
1140

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gtttgaggct taatgctaaa tatgtgctaa atactggatt aatagatttc agtaaagctc  
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 gttcaaaaaa aaaaaaaaaa aaaaaaa  
 1227

<210> 3896

<211> 346

<212> PRT

<213> Homo sapiens

<400> 3896

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Leu	Lys	Gln	His	Lys	Glu	Ala	Lys	Arg	Phe	Glu	Ile	Ala	Arg	Ser	Gln
		20					25						30		
Pro	Glu	Asp	Thr	Pro	Glu	Asn	Thr	Val	Arg	Arg	Gln	Glu	Gln	Pro	Ser
		35					40					45			
Ile	Glu	Ser	Thr	Ser	Pro	Ile	Ser	Arg	Thr	Asp	Glu	Ile	Arg	Lys	Asn
50						55					60				
Thr	Tyr	Arg	Thr	Leu	Asp	Ser	Leu	Glu	Gln	Thr	Ile	Lys	Gln	Leu	Glu
65				70					75					80	
Asn	Thr	Ile	Ser	Glu	Met	Ser	Pro	Lys	Ala	Leu	Val	Asp	Thr	Ser	Cys
			85						90					95	
Ser	Ser	Asn	Arg	Asp	Ser	Val	Ala	Ser	Ser	Ser	His	Ile	Ala	Gln	Glu
			100					105					110		
Ala	Ser	Pro	Arg	Pro	Leu	Leu	Val	Pro	Asp	Glu	Gly	Pro	Thr	Ala	Leu
		115					120					125			
Glu	Pro	Pro	Thr	Ser	Ile	Pro	Ser	Ala	Ser	Arg	Lys	Gly	Ser	Ser	Gly
130						135					140				
Ala	Pro	Gln	Thr	Ser	Arg	Met	Pro	Val	Pro	Met	Ser	Ala	Lys	Asn	Arg
145				150						155				160	
Pro	Gly	Thr	Leu	Asp	Lys	Pro	Gly	Lys	Gln	Ser	Lys	Leu	Gln	Asp	Pro
			165					170						175	
Arg	Gln	Tyr	Arg	Gln	Ala	Asn	Gly	Ser	Ala	Lys	Lys	Ser	Gly	Gly	Asp
		180					185						190		
Phe	Lys	Pro	Thr	Ser	Pro	Ser	Leu	Pro	Ala	Ser	Lys	Ile	Pro	Ala	Leu
		195					200					205			
Ser	Pro	Ser	Ser	Gly	Lys	Ser	Ser	Ser	Leu	Pro	Ser	Ser	Ser	Gly	Asp
210						215					220				
Ser	Ser	Asn	Leu	Pro	Asn	Pro	Pro	Ala	Thr	Lys	Pro	Ser	Ile	Ala	Ser
225				230						235				240	
Asn	Pro	Leu	Ser	Pro	Gln	Thr	Gly	Pro	Pro	Ala	His	Ser	Ala	Ser	Leu
			245							250				255	
Ile	Pro	Ser	Val	Ser	Asn	Gly	Ser	Leu	Lys	Phe	Gln	Ser	Leu	Thr	His
		260					265						270		
Thr	Gly	Lys	Gly	His	His	Leu	Ser	Phe	Ser	Pro	Gln	Ser	Gln	Asn	Gly
		275					280						285		
Arg	Ala	Pro	Pro	Pro	Leu	Ser	Phe	Ser	Ser	Ser	Pro	Pro	Ser	Pro	Ala
		290				295					300				
Ser	Ser	Val	Ser	Leu	Asn	Gln	Gly	Ala	Lys	Gly	Thr	Arg	Thr	Ile	His
305					310					315				320	
Thr	Pro	Ser	Leu	Thr	Ser	Tyr	Lys	Ala	Gln	Asn	Gly	Ser	Ser	Ser	Lys
			325						330					335	
Ala	Thr	Pro	Ser	Thr	Ala	Lys	Glu	Thr	Ser						

340

345

&lt;210&gt; 3897

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3897

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120
cttctgggca cccacgcttt gtccatgaat ggaaagcaat gctgacggct gccaatgtg
180
tccaggacgt ttctgaaact cctgttcctc tccccgtccc tctctctgtc ccaactgtcca
240
cctcagtgc ctcctctctt cgtggctctc accccacact ctgccactgc cacattttcc
300
tctgcgcccc gcctctgcct ccacctgaaa ctttctctga aatctcaaaa tgtaattcca
360
ggtccc
366

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&lt;210&gt; 3898

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3898

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Met Glu Glu Ala Leu His Ser His Leu Gln Leu Ser Gln His Arg Val
1      5      10      15
Met Ala Gly Arg Pro Gly Leu Leu His Trp Leu Leu Ala Ser Ser Gly
20     25     30
His Pro Arg Phe Val His Glu Trp Lys Ala Met Leu Thr Ala Ala Gln
35     40     45
Cys Val Gln Asp Val Ser Glu Thr Pro Val Pro Leu Pro Val Pro Leu
50     55     60
Ser Val Pro Leu Ser Thr Ser Val Thr Ser Ser Leu Arg Gly Ser His
65     70     75     80
Pro Thr Leu Cys His Cys His Ile Phe Leu Cys Ala Gln Pro Leu Pro
85     90     95
Pro Pro Glu Thr Phe Leu Glu Ile Ser Lys Cys Asn Ser Arg Ser
100    105    110

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&lt;210&gt; 3899

&lt;211&gt; 1092

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3899

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120

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 240  
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 300  
 ctgacggagc agtaccacaca aggccctgggc cccacgggtgc ccgagctggg gactngaggg  
 360  
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 420  
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 aacacgaccc tggacctcct agaccggggg ctgcaggtcc atgtggtggt ggacgcctgc  
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 aaaaaaaaaa aa  
 1092

<210> 3900

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3900

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Pro	Ser	Glu	Arg	Arg	Glu	Val	Arg	Val	Pro	Pro	Pro	His	Leu	Gln	Arg
			20					25					30		
Gly	Arg	Ser	Gly	Leu	Glu	Pro	Gly	Thr	Phe	Arg	Lys	Met	Ala	Ala	Ala
			35				40					45			
Arg	Pro	Ser	Leu	Gly	Arg	Val	Leu	Pro	Gly	Ser	Ser	Val	Leu	Phe	Leu
			50				55					60			
Cys	Asp	Met	Gln	Glu	Lys	Phe	Arg	His	Asn	Ile	Ala	Tyr	Phe	Pro	Gln
65					70				75					80	
Ile	Val	Ser	Val	Ala	Ala	Arg	Met	Leu	Lys	Val	Ala	Arg	Leu	Leu	Glu
				85					90					95	
Val	Pro	Val	Met	Leu	Thr	Glu	Gln	Tyr	Pro	Gln	Gly	Leu	Gly	Pro	Thr

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      100      105      110
Val Pro Glu Leu Gly Thr Xaa Gly Pro Ser Ala Ala Gly Gln Asp Leu
      115      120      125
Leu Gln His Gly Ala Cys Leu Gln Gln Glu Leu Asp Ser Arg Pro Gln
      130      135      140
Leu Arg Ser Val Leu Leu Cys Gly Ile Glu Ala Gln Ala Cys Ile Leu
      145      150      155      160
Asn Thr Thr Leu Asp Leu Leu Asp Arg Gly Leu Gln Val His Val Val
      165      170      175
Val Asp Ala Cys Ser Ser Arg Ser Gln Val Asp Arg Leu Val Ala Leu
      180      185      190
Ala Arg Met Arg Gln Ser Gly Ala Phe Leu Ser Thr Ser Glu Gly Leu
      195      200      205
Ile Leu Gln Leu Val Gly Asp Ala Val His Pro Gln Phe Lys Glu Ile
      210      215      220
Gln Lys Leu Ile Lys Glu Pro Ala Pro Asp Ser Gly Leu Leu Gly Leu
      225      230      235      240
Phe Gln Gly Gln Asn Ser Leu Leu His
      245

```

&lt;210&gt; 3901

&lt;211&gt; 1287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3901

```

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240
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720
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cccaagtctg ccctggctgc cgtcatcatc atggccgtgg ccccgctgtt cgacaccaag
840

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 1287

<210> 3902

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3902

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Val	His	Pro	Glu	Met	Pro	Pro	Gly	Val	Arg	Leu	Ser	Arg	Gly	Leu	Val	20	25	30	
Trp	Ala	Ala	Thr	Thr	Ala	Arg	Asn	Ala	Leu	Val	Val	Ser	Phe	Ala	Ala	35	40	45	
Leu	Val	Ala	Tyr	Ser	Phe	Glu	Val	Thr	Gly	Tyr	Gln	Pro	Phe	Ile	Leu	50	55	60	
Thr	Gly	Glu	Thr	Ala	Glu	Gly	Leu	Pro	Pro	Val	Arg	Ile	Pro	Pro	Phe	65	70	75	80
Ser	Val	Thr	Thr	Ala	Asn	Gly	Thr	Ile	Ser	Phe	Thr	Glu	Met	Val	Gln	85	90	95	
Asp	Met	Gly	Ala	Gly	Leu	Ala	Val	Val	Pro	Leu	Met	Gly	Leu	Leu	Glu	100	105	110	
Ser	Ile	Ala	Val	Ala	Lys	Ala	Phe	Ala	Ser	Gln	Asn	Asn	Tyr	Arg	Ile	115	120	125	
Asp	Ala	Asn	Gln	Glu	Leu	Leu	Ala	Ile	Gly	Leu	Thr	Asn	Met	Leu	Gly	130	135	140	
Ser	Leu	Val	Ser	Ser	Tyr	Pro	Val	Thr	Gly	Ser	Phe	Gly	Arg	Thr	Ala	145	150	155	160
Val	Asn	Ala	Gln	Ser	Gly	Val	Cys	Thr	Pro	Ala	Gly	Gly	Leu	Val	Thr	165	170	175	
Gly	Val	Leu	Val	Leu	Leu	Ser	Leu	Asp	Tyr	Leu	Thr	Ser	Leu	Phe	Tyr	180	185	190	
Tyr	Ile	Pro	Lys	Ser	Ala	Leu	Ala	Ala	Val	Ile	Ile	Met	Ala	Val	Ala	195	200	205	
Pro	Leu	Phe	Asp	Thr	Lys	Ile	Phe	Arg	Thr	Leu	Trp	Arg	Val	Lys	Arg	210	215	220	
Leu	Asp	Leu	Leu	Pro	Leu	Cys	Val	Thr	Phe	Leu	Leu	Cys	Phe	Trp	Glu	225	230	235	240
Val	Gln	Tyr	Gly	Ile	Leu	Ala	Gly	Ala	Leu	Val	Ser	Leu	Leu	Met	Leu				

```

                245                250                255
Leu His Ser Ala Ala Arg Pro Glu Thr Lys Val Ser Glu Gly Pro Val
                260                265                270
Leu Val Leu Gln Pro Ala Ser Gly Leu Ser Phe Pro Val Leu Cys Pro
                275                280                285
Pro Leu Pro Ala Val Gln Asp Pro Lys Thr Leu Ser Pro Thr Leu Ser
                290                295                300
Ser Pro Gln Gly Cys Arg His Leu
305                310

```

&lt;210&gt; 3903

&lt;211&gt; 598

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3903

```

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120
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180
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240
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300
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360
cgtcttgact tcaaacgcct ggaccgccca gtggtgctgg cggcaggagc tgccggcatat
420
gctgacacta agctggctaa tgtactgttt gcccgaggagc tcgccaacca gcttgaggcc
480
actggcgtca cctgctatgc agcccaccca gggcctgtga actcggagct gttcctgcgc
540
catgttcctg gatggctgcg ccacttttg cgccatttg cttggctggt gccccggg
598

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&lt;210&gt; 3904

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3904

```

Ala Arg Arg Gly Ala Arg Val Val Leu Ala Cys Arg Ser Gln Glu Arg
1      5      10      15
Gly Glu Ala Ala Ala Phe Asp Leu Arg Gln Glu Ser Gly Asn Asn Glu
20     25     30
Val Ile Phe Met Ala Leu Asp Leu Ala Ser Leu Ala Ser Val Arg Ala
35     40     45
Phe Ala Thr Ala Phe Leu Ser Ser Glu Pro Arg Leu Asp Ile Leu Ile
50     55     60
His Asn Ala Gly Ile Ser Ser Cys Gly Arg Thr Arg Glu Ala Phe Asn
65     70     75     80
Leu Leu Leu Arg Val Asn His Ile Gly Pro Phe Leu Leu Thr His Leu

```

```

      85      90      95
Leu Leu Pro Cys Leu Lys Ala Cys Ala Pro Ser Arg Val Val Val Val
      100      105      110
Ala Ser Ala Ala His Cys Arg Gly Arg Leu Asp Phe Lys Arg Leu Asp
      115      120      125
Arg Pro Val Val Leu Ala Ala Gly Ala Ala Ala Tyr Ala Asp Thr Lys
      130      135      140
Leu Ala Asn Val Leu Phe Ala Arg Glu Leu Ala Asn Gln Leu Glu Ala
145      150      155      160
Thr Gly Val Thr Cys Tyr Ala Ala His Pro Gly Pro Val Asn Ser Glu
      165      170      175
Leu Phe Leu Arg His Val Pro Gly Trp Leu Arg Pro Leu Leu Arg Pro
      180      185      190
Leu Ala Trp Leu Val Pro Arg
      195

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<210> 3905  
 <211> 370  
 <212> DNA  
 <213> Homo sapiens

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<400> 3905
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240
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```

<210> 3906  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

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<400> 3906
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Leu Glu Gly Thr Ser Glu Met Ala Val Thr Phe Asp Lys Val Tyr Val
      20      25      30
Asn Ile Gly Gly Asp Phe Asp Val Ala Thr Gly Gln Phe Arg Cys Arg
      35      40      45
Val Pro Gly Ala Tyr Phe Phe Ser Phe Thr Ala Gly Lys Ala Pro His
      50      55      60
Lys Ser Pro Ser Val Met Leu Val Arg Asn Arg Asp Glu Val Gln Ala
65      70      75      80
Leu Ala Phe Asp Glu Gln Arg Arg Pro Gly Ala Arg Arg Ala Ala Ser

```

	85		90		95
Gln Ser Ala Met Leu Gln Leu Asp Tyr Gly Asp Thr Val Trp Leu Arg					
	100		105		110
Leu His Gly Ala Pro Gln Tyr Ala Leu Gly Ala					
	115		120		

&lt;210&gt; 3907

&lt;211&gt; 4474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3907

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&lt;210&gt; 3908

&lt;211&gt; 1373

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3908

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 Trp Pro Gln Arg Ala Ala Lys Ile Ala Gly Pro Gly Arg Lys Arg Arg  
 20 25 30  
 Ser Pro Asp Pro Asp Ala Val Ala Asp Pro Gly Ala Leu Trp Leu Ser  
 35 40 45  
 Thr Lys Arg Leu Lys Met Ser Gly Gly Ala Ser Ala Thr Gly Pro Arg  
 50 55 60  
 Arg Gly Pro Pro Gly Leu Glu Asp Thr Thr Ser Lys Lys Lys Gln Lys  
 65 70 75 80  
 Asp Arg Ala Asn Gln Glu Ser Lys Asp Gly Asp Pro Arg Lys Glu Thr  
 85 90 95  
 Gly Ser Arg Tyr Val Ala Gln Ala Gly Leu Glu Pro Leu Ala Ser Gly  
 100 105 110  
 Asp Pro Ser Ala Ser Ala Ser His Ala Ala Gly Ile Thr Gly Ser Arg  
 115 120 125  
 His Arg Thr Arg Leu Phe Phe Pro Ser Ser Ser Gly Ser Ala Ser Thr  
 130 135 140  
 Pro Gln Glu Glu Gln Thr Lys Glu Gly Ala Cys Glu Asp Pro His Asp  
 145 150 155 160  
 Leu Leu Ala Thr Pro Thr Pro Glu Leu Leu Asp Trp Arg Gln Ser  
 165 170 175  
 Ala Glu Glu Val Ile Val Lys Leu Arg Val Gly Val Gly Pro Leu Gln  
 180 185 190  
 Leu Glu Asp Val Asp Ala Ala Phe Thr Asp Thr Asp Cys Val Val Arg  
 195 200 205  
 Phe Ala Gly Gly Gln Gln Trp Gly Gly Val Phe Tyr Ala Glu Ile Lys  
 210 215 220  
 Ser Ser Cys Ala Lys Val Gln Thr Arg Lys Gly Ser Leu Leu His Leu  
 225 230 235 240  
 Thr Leu Pro Lys Lys Val Pro Met Leu Thr Trp Pro Ser Leu Leu Val  
 245 250 255  
 Glu Ala Asp Glu Gln Leu Cys Ile Pro Pro Leu Asn Ser Gln Thr Cys  
 260 265 270  
 Leu Leu Gly Ser Glu Glu Asn Leu Ala Pro Leu Ala Gly Glu Lys Ala  
 275 280 285  
 Val Pro Pro Gly Asn Asp Pro Val Ser Pro Ala Met Val Arg Ser Arg  
 290 295 300  
 Asn Pro Gly Lys Asp Asp Cys Ala Lys Glu Glu Met Ala Val Ala Ala  
 305 310 315 320  
 Asp Ala Ala Thr Leu Val Asp Gly Lys Glu Pro Glu Ser Met Val Asn  
 325 330 335  
 Leu Ala Phe Val Lys Asn Asp Ser Tyr Glu Lys Gly Pro Asp Ser Val  
 340 345 350  
 Val Val His Val Tyr Val Lys Glu Ile Cys Arg Asp Thr Ser Arg Val  
 355 360 365  
 Leu Phe Arg Glu Gln Asp Phe Thr Leu Ile Phe Gln Thr Arg Asp Gly

```

      370              375              380
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<213> Homo sapiens

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Ser Glu Lys Lys Met Glu Ser Glu Glu Asp Ser Asn Trp Glu Lys Ser  
20 25 30  
Pro Asp Asn Glu Asp Ser Gly Asp Ser Lys Asp Ile Arg Leu Thr Leu  
35 40 45  
Met Glu Glu Val Leu Leu Leu Gly Leu Lys Asp Lys Glu Gly Tyr Thr  
50 55 60  
Ser Phe Trp Asn Asp Cys Ile Ser Ser Gly Leu Arg Gly Gly Ile Leu  
65 70 75 80  
Ile Glu Leu Ala Met Arg Gly Arg Ile Tyr Leu Glu Pro Pro Thr Met  
85 90 95  
Arg Lys Lys Arg Leu Leu Asp Arg Lys Val Leu Leu Lys Ser Asp Ser  
100 105 110  
Pro Thr Gly Asp Val Leu Leu Asp Glu Thr Leu Lys His Ile Lys Ala  
115 120 125  
Thr Glu Pro Thr Glu Thr Val Gln Thr Trp Ile Glu Leu Leu Thr Gly

130  
Glu Thr Trp Asn Pro Phe Lys Leu  
145 150

140

<210> 3919  
<211> 1278  
<212> DNA  
<213> Homo sapiens

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caggcacagc atccaccag ccccatcaag tctccagcg ccgactccac tcccagcccc  
180  
accagcagcc tctctagcga agacaagcag cacctggccg tagagctggc cgacaccaag  
240  
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300  
agacatgagg tggaccagct ggtgctggaa ctgcagaaag ttaagcagga gaacatccag  
360  
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420  
aaggcgaacc gcgtggagag gctggagctg gagctgacct gctgcaagga gaagctgcac  
480  
gacgtggact tctacaaggc ccgcatggag gagctgagag aagataatat cattttaatt  
540  
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600  
catgagctgg aaaaggagaa cctgcagctg aaatccaagc ttcacgacct ggaattggac  
660  
cgggacacag ataagaaacg aattgaggag ctgctggaag aaaacatggt ccttgagatt  
720  
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780  
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840  
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900  
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960  
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1278

<210> 3920  
 <211> 426  
 <212> PRT  
 <213> Homo sapiens

<400> 3920

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Arg Arg Leu Ile Asp Gln Arg Asp Glu Cys Thr Glu Leu Ile Val Asp
 20          25          30
Leu Thr Gln Glu Arg Asp Tyr Leu Gln Ala Gln His Pro Pro Ser Pro
 35          40          45
Ile Lys Ser Ser Ser Ala Asp Ser Thr Pro Ser Pro Thr Ser Ser Leu
 50          55          60
Ser Ser Glu Asp Lys Gln His Leu Ala Val Glu Leu Ala Asp Thr Lys
 65          70          75          80
Ala Arg Leu Arg Arg Val Arg Gln Glu Leu Glu Asp Lys Thr Glu Gln
 85          90          95
Leu Val Asp Thr Arg His Glu Val Asp Gln Leu Val Leu Glu Leu Gln
 100         105         110
Lys Val Lys Gln Glu Asn Ile Gln Leu Ala Ala Asp Ala Arg Ser Ala
 115         120         125
Arg Ala Tyr Arg Asp Glu Leu Asp Ser Leu Arg Glu Lys Ala Asn Arg
 130         135         140
Val Glu Arg Leu Glu Leu Glu Leu Thr Arg Cys Lys Glu Lys Leu His
 145         150         155         160
Asp Val Asp Phe Tyr Lys Ala Arg Met Glu Glu Leu Arg Glu Asp Asn
 165         170         175
Ile Ile Leu Ile Glu Thr Lys Ala Met Leu Glu Glu Gln Leu Thr Ala
 180         185         190
Ala Arg Ala Arg Gly Asp Lys Val His Glu Leu Glu Lys Glu Asn Leu
 195         200         205
Gln Leu Lys Ser Lys Leu His Asp Leu Glu Leu Asp Arg Asp Thr Asp
 210         215         220
Lys Lys Arg Ile Glu Glu Leu Leu Glu Glu Asn Met Val Leu Glu Ile
 225         230         235         240
Ala Gln Lys Gln Ser Met Asn Glu Ser Ala His Leu Gly Trp Glu Leu
 245         250         255
Glu Gln Leu Ser Lys Asn Ala Asp Leu Ser Asp Ala Ser Arg Lys Ser
 260         265         270
Phe Val Phe Glu Leu Asn Glu Cys Ala Ser Ser Arg Ile Leu Lys Leu
 275         280         285
Glu Lys Glu Asn Gln Ser Leu Gln Ser Thr Ile Gln Gly Leu Arg Asp
 290         295         300
Ala Ser Leu Val Leu Glu Glu Ser Gly Leu Lys Cys Gly Glu Leu Glu
 305         310         315         320
Lys Glu Asn His Gln Leu Ser Lys Lys Ile Glu Lys Leu Gln Thr Gln
 325         330         335
Leu Glu Arg Glu Lys Gln Ser Asn Gln Asp Leu Glu Thr Leu Ser Glu
 340         345         350
Glu Leu Ile Arg Glu Lys Glu Gln Leu Gln Ser Asp Met Glu Thr Leu
 355         360         365
Lys Ala Asp Lys Ala Arg Gln Ile Lys Asp Leu Glu Gln Glu Lys Asp

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370	375	380
His Leu Asn Arg Ala Met Trp Ser Leu Arg Glu Arg Ser Gln Val Ser		
385	390	395
Ser Glu Ala Arg Met Lys Asp Val Glu Lys Glu Asn Lys Ala Leu His		400
	405	410
Gln Thr Val Thr Glu Ala Asn Gly Lys Leu		415
	420	425

<210> 3921  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

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 atgcctctgc tgcttgccag cctcgtgacc ttcatcatg cagggccttg ttttcttgat  
 180  
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 240  
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 300  
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<210> 3922  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 3922
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Leu Leu Ala Ser Leu Val Thr Phe Ile His Ala Gly Pro Cys Phe Leu
35 40 45
Asp Ser Val Gly Pro Ile Pro Ala Pro Arg Gly Asp Gly Cys Cys Arg
50 55 60
Asp Val Gln Ala Val Glu Gly Ser Arg Glu Trp Ala Trp Arg Ser Ala
65 70 75 80
Ser Leu Ala Pro Leu Leu Asp Ala Phe Leu Gln Pro Leu Glu Leu Arg
85 90 95
Gln Cys Ser Val Arg Met Ile Ile Gly Phe Pro Pro Gln Phe Leu Ala
100 105 110
His Ser Phe Val Ala Leu Val Thr Ala Phe Cys Asp Asn Ile
115 120 125

<210> 3923  
 <211> 820

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3923

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 120  
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 180  
 agaccacact cccactgggt ttgtcgcagt tttttaaggg agccattttg ttctaagtgc  
 240  
 ttgggtcttg agtgtctttt ccggcctcga cgcaaagaag gaagtggctc ttcacttagg  
 300  
 ctctcaacta gaacaccatt agtcagatca aaatgattta atgtcttcaa ttgttgcttt  
 360  
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 420  
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 480  
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 540  
 cagggtttcca gtgggatctc agtgcacttt ttattatcac tgtcctgttc tgcttttggt  
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 720  
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 820

&lt;210&gt; 3924

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3924

Met	Gly	Glu	Glu	Leu	Leu	Gly	Ser	Glu	Gly	Ile	His	Ser	Ser	Lys	Glu
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Lys	Pro	Leu	Val	Ala	Val	Asn	Thr	Arg	Leu	Ser	Gly	Gly	Gln	Val	Leu
			20					25					30		
Ser	Glu	Tyr	Thr	Gly	Pro	Thr	Ser	Ala	Asp	Leu	Asp	His	Phe	Pro	Ser
		35					40					45			
Val	Ser	Gln	Thr	Lys	Ala	Glu	Gln	Asp	Ser	Asp	Asn	Lys	Ser	Ser	Thr
		50				55				60					
Glu	Ile	Pro	Leu	Glu	Thr	Cys	Cys	Ser	Ser	Glu	Leu	Lys	Gly	Gly	Gly
65					70					75				80	
Ser	Gly	Thr	Ser	Leu	Glu	Arg	Glu	Gln	Phe	Glu	Gly	Leu	Gly	Ser	Thr
			85					90						95	
Pro	Asp	Ala	Lys	Leu	Asp	Lys	Thr	Cys	Ile	Ser	Arg	Ala	Met	Lys	Ile
		100						105					110		
Thr	Thr	Val	Asn	Ser	Val	Leu	Pro	Gln	Asn	Ser	Val	Leu	Gly	Gly	Val

115	120	125
Leu Lys Thr Lys Gln Gln Leu Lys Thr Leu Asn His Phe Asp Leu Thr		
130	135	140
Asn Gly Val Leu Val Glu Ser Leu Ser Glu Glu Pro Leu Pro Ser Leu		
145	150	155
Arg Arg Gly Arg Lys Arg His Cys Lys Thr Lys His Leu Glu Gln Asn		
165	170	175
Gly Ser Leu Lys Lys Leu Arg Gln Thr Ser Gly Glu Val Gly Leu Ala		
180	185	190
Pro Thr Asp Pro Val Leu Arg Glu Met Glu Gln Lys Leu Gln Gln Glu		
195	200	205
Glu Glu Asp Arg Gln Leu Ala Leu Gln Leu Gln Arg Met Phe Asp Asn		
210	215	220
Glu Arg Arg Thr Val Ser Arg Arg Lys Gly Ser Val Asp Gln Tyr Leu		
225	230	235
Leu Arg Ser Ser Asn Met Ala Gly Gly Arg		
245	250	

&lt;210&gt; 3925

&lt;211&gt; 3296

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3925

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240
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 1980  
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 3296

&lt;210&gt; 3926

&lt;211&gt; 683

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3926

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1				5					10					15	
Leu	Ile	Cys	Ile	Leu	Thr	Phe	Gly	Ala	Ile	Phe	Leu	Trp	Leu	Ile	
		20					25					30			
Thr	Arg	Pro	Gln	Pro	Val	Leu	Pro	Leu	Asp	Leu	Asn	Asn	Gln	Ser	
		35					40				45				
Val	Gly	Ile	Glu	Gly	Gly	Ala	Arg	Lys	Gly	Val	Ser	Gln	Lys	Asn	Asn
		50				55					60				
Asp	Leu	Thr	Ser	Cys	Cys	Phe	Ser	Asp	Ala	Lys	Thr	Met	Tyr	Glu	Val
				70						75				80	
Phe	Gln	Arg	Gly	Leu	Ala	Val	Ser	Asp	Asn	Gly	Pro	Cys	Leu	Gly	Tyr
				85					90					95	
Arg	Lys	Pro	Asn	Gln	Pro	Tyr	Arg	Trp	Leu	Ser	Tyr	Lys	Gln	Val	Ser
		100						105					110		
Asp	Arg	Ala	Glu	Tyr	Leu	Gly	Ser	Cys	Leu	Leu	His	Lys	Gly	Tyr	Lys
		115				120						125			
Ser	Ser	Pro	Asp	Gln	Phe	Val	Gly	Ile	Phe	Ala	Gln	Asn	Arg	Pro	Glu
		130				135					140				
Trp	Ile	Ile	Ser	Glu	Leu	Ala	Cys	Tyr	Thr	Tyr	Ser	Met	Val	Ala	Val
				150						155				160	
Pro	Leu	Tyr	Asp	Thr	Leu	Gly	Pro	Glu	Ala	Ile	Val	His	Ile	Val	Asn

165 170 175  
 Lys Ala Asp Ile Ala Met Val Ile Cys Asp Thr Pro Gln Lys Ala Leu  
 180 185 190  
 Val Leu Ile Gly Asn Val Glu Lys Gly Phe Thr Pro Ser Leu Lys Val  
 195 200 205  
 Ile Ile Leu Met Asp Pro Phe Asp Asp Asp Leu Lys Gln Arg Gly Glu  
 210 215 220  
 Lys Ser Gly Ile Glu Ile Leu Ser Leu Tyr Asp Ala Glu Asn Leu Asp  
 225 230 235 240  
 Lys Glu His Phe Arg Lys Pro Val Pro Pro Ser Pro Glu Asp Leu Ser  
 245 250 255  
 Val Ile Cys Phe Thr Ser Gly Thr Thr Gly Asp Pro Lys Gly Ala Met  
 260 265 270  
 Ile Thr His Gln Asn Ile Val Ser Asn Ala Ala Ala Phe Leu Lys Cys  
 275 280 285  
 Val Glu His Ala Tyr Glu Pro Thr Pro Asp Asp Val Ala Ile Ser Tyr  
 290 295 300  
 Leu Pro Leu Ala His Met Phe Glu Arg Ile Val Gln Ala Val Val Tyr  
 305 310 315 320  
 Ser Cys Gly Ala Arg Val Gly Phe Phe Gln Gly Asp Ile Arg Leu Leu  
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 Ala Asp Asp Met Lys Thr Leu Lys Pro Thr Leu Phe Pro Ala Val Pro  
 340 345 350  
 Arg Leu Leu Asn Arg Ile Tyr Asp Lys Val Gln Asn Glu Ala Lys Thr  
 355 360 365  
 Pro Leu Lys Lys Phe Leu Leu Lys Leu Ala Val Ser Ser Lys Phe Lys  
 370 375 380  
 Glu Leu Gln Lys Gly Ile Ile Arg His Asp Ser Phe Trp Asp Lys Leu  
 385 390 395 400  
 Ile Phe Ala Lys Ile Gln Asp Ser Leu Gly Gly Arg Val Arg Val Ile  
 405 410 415  
 Val Thr Gly Ala Ala Pro Ile Ser Thr Pro Val Leu Thr Phe Phe Arg  
 420 425 430  
 Ala Ala Met Gly Cys Trp Val Phe Glu Ala Tyr Gly Gln Thr Glu Cys  
 435 440 445  
 Thr Gly Gly Cys Thr Phe Thr Leu Pro Gly Asp Trp Thr Ser Gly His  
 450 455 460  
 Val Gly Val Pro Leu Ala Cys Asn Tyr Val Lys Leu Glu Asp Val Ala  
 465 470 475 480  
 Asp Met Asn Tyr Phe Thr Val Asn Asn Glu Gly Glu Val Cys Ile Lys  
 485 490 495  
 Gly Thr Asn Val Phe Lys Gly Tyr Leu Lys Asp Pro Glu Lys Thr Gln  
 500 505 510  
 Glu Ala Leu Asp Ser Asp Gly Trp Leu His Thr Gly Asp Ile Gly Arg  
 515 520 525  
 Trp Leu Pro Asn Gly Thr Leu Lys Ile Ile Asp Arg Lys Lys Asn Ile  
 530 535 540  
 Phe Lys Leu Ala Gln Gly Glu Tyr Ile Ala Pro Glu Lys Ile Glu Asn  
 545 550 555 560  
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 565 570 575  
 Ser Leu Arg Ser Ser Leu Val Gly Val Val Val Pro Asp Thr Asp Val  
 580 585 590  
 Leu Pro Ser Phe Ala Ala Lys Leu Gly Val Lys Gly Ser Phe Glu Glu

595	600	605
Leu Cys Gln Asn Gln Val Val Arg Glu Ala Ile Leu Glu Asp Leu Gln		
610	615	620
Lys Ile Gly Lys Glu Ser Gly Leu Lys Thr Phe Glu Gln Val Lys Ala		
625	630	635
Ile Phe Leu His Pro Glu Pro Phe Ser Ile Glu Asn Gly Leu Leu Thr		640
	645	650
Pro Thr Leu Lys Ala Lys Arg Gly Glu Leu Ser Lys Tyr Phe Arg Thr		655
	660	665
Gln Ile Asp Ser Leu Tyr Glu His Ile Gln Asp		670
675	680	

&lt;210&gt; 3927

&lt;211&gt; 3197

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3927

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240  
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<212> PRT

<213> Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3933

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<211> 130

<212> PRT

<213> Homo sapiens

<400> 3934

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			20					25					30		
Ala	Ala	Gly	Thr	Ser	Ser	Pro	Ile	Arg	Pro	Val	Ser	Ser	Pro	Val	Leu
		35					40				45				
Ser	Ser	Ser	Asn	Lys	Ser	Pro	Ser	Ser	Ala	Trp	Ser	Ser	Ser	Ser	Trp
	50					55					60				
His	Gly	Arg	Ile	Lys	Gly	Gly	Met	Lys	Gly	Phe	Gln	Ser	Phe	Met	Val
65					70				75					80	
Ser	Asp	Ser	Asn	Met	Ser	Phe	Val	Glu	Phe	Val	Glu	Leu	Phe	Lys	Ser
			85					90						95	
Phe	Ser	Val	Arg	Ser	Arg	Lys	Asp	Leu	Lys	Asp	Leu	Phe	Asp	Xaa	Leu



	100		105		110										
Cys	Ser	Ala	Leu	Gln	Pro	Xaa	Leu	Ala	Pro	Ser	Gln	Pro	His	Ser	Thr
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Pro	Thr														
	130														

&lt;210&gt; 3935

&lt;211&gt; 1103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3935

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&lt;210&gt; 3936

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3936

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Val Gly Gly Thr Glu His Ala Tyr Arg Pro Gly Arg Arg Val Cys Ala
          20           25           30
Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val
          35           40           45
Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr
          50           55           60
Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala
65           70           75           80
Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser
          85           90           95
Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg
          100          105          110
Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly
          115          120          125
Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg
          130          135          140
Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp
145          150          155          160
Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys
          165          170          175
Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Lys
          180          185          190
Gln Pro Trp Leu Cys Leu Ala Trp Gly Gly Gly Gln Ala Val Asp Ile
          195          200          205
Ala Val Trp Leu Leu Gly Met Val Gly Gly Thr Gly Ile Trp Ala Glu
          210          215          220
Gly Gly Gly Asp Ser Leu Ser Arg Glu Gly Gly Trp Gly Gly Arg Ile
225          230          235          240
Gly Gly Phe Pro Arg Thr Gly Gly Arg Leu Pro Gly Ala Ser Tyr Gln
          245          250          255
Pro Arg Arg Gln Lys Cys Pro Val Pro
          260          265

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&lt;210&gt; 3937

&lt;211&gt; 744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3937

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300

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<210> 3938  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Arg Ala Ala Glu Ala Gly Asn Ala Lys Gly Asp Ala Thr Ala Gly Pro  
 50 55 60  
 Lys Glu Gln Gly Gly Gly Gly Gln Asp Pro Ala Ala Ile Ala Gly His  
 65 70 75 80  
 Ser Ala Gly Gly Ser Asp His Ala Gly Glu Arg Gly Leu Xaa Gly Arg  
 85 90 95  
 Thr Gly Trp Leu Ala Ala Lys Ala Ala Pro Ala Gly Gly His Arg Glu  
 100 105 110  
 Thr Gly Leu Ala Ser Val Gly Ala Gly Pro Trp Leu Gly Arg Arg Asn  
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 Pro Arg Gln Pro Phe Ser Phe Val Gly Pro Ala Glu Ser Pro Asp Arg  
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 Asp Thr Met Pro Gly Leu Ser Gly Val Leu  
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<210> 3939  
 <211> 490  
 <212> DNA  
 <213> Homo sapiens

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<210> 3940

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3940

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Thr	Asp	Arg	Gln	Thr	Gly	Lys	Val	Arg	Trp	Lys	His	Thr	Glu	Asp	Glu
		20					25					30			
Arg	Asp	Arg	Gln	Trp	Glu	Ala	Glu	Leu	Lys	Thr	Val	Lys	Glu	Arg	Ala
		35				40					45				
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<210> 3941

<211> 2077

<212> DNA

<213> Homo sapiens

<400> 3941

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1980  
actgagtctc taacagtcct gccaccacca cccccaaca cacacacaca cacacacaca  
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&lt;210&gt; 3942

<211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 3942  
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                   20                  25                  30  
 Gln Glu Arg Leu Arg Leu Thr Arg Gly Trp Ser Pro Gln Gly Gly Cys  
           35                  40                  45  
 Gly Ala Arg Ser Gln Ser Thr Pro Ser Ser Asp Thr Leu Pro Pro Ala  
           50                  55                  60  
 Leu Leu Gly Ser Pro Ala Ser Val Ser Gly Thr Gly Gly Thr Asp Met  
           65                  70                  75                  80  
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<210> 3943  
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 <212> DNA  
 <213> Homo sapiens

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<210> 3944

<211> 435

<212> PRT

<213> Homo sapiens

<400> 3944

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Arg	Leu	Gly	Pro	Thr	Pro	Gly	Pro	Pro	Pro	Ser	Pro	Gly	Arg	Pro	Ala
			20						25				30		
Val	Gly	Thr	Met	Ser	Gln	Val	Leu	Gly	Lys	Pro	Gln	Pro	Gln	Asp	Glu
		35					40					45			
Asp	Asp	Ala	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	Leu	Val	Gly	Leu	Ala
	50				55					60					
Asp	Tyr	Gly	Asp	Gly	Pro	Asp	Ser	Ser	Asp	Ala	Asp	Pro	Asp	Ser	Gly
65					70					75				80	
Thr	Glu	Glu	Gly	Val	Leu	Asp	Phe	Ser	Asp	Pro	Phe	Ser	Thr	Glu	Val
			85						90					95	
Lys	Pro	Arg	Ile	Leu	Leu	Met	Gly	Leu	Arg	Arg	Ser	Gly	Lys	Ser	Ser
			100					105					110		
Ile	Gln	Lys	Val	Val	Phe	His	Lys	Met	Ser	Pro	Asn	Glu	Thr	Leu	Phe
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Leu	Glu	Ser	Thr	Asn	Lys	Ile	Cys	Arg	Glu	Asp	Val	Ser	Asn	Ser	Ser
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Phe	Val	Asn	Phe	Gln	Ile	Trp	Asp	Phe	Pro	Gly	Gln	Ile	Asp	Phe	Phe
145				150					155					160	
Asp	Pro	Thr	Phe	Asp	Tyr	Glu	Met	Ile	Phe	Arg	Gly	Thr	Gly	Ala	Leu
			165					170						175	
Ile	Phe	Val	Ile	Asp	Ala	Gln	Asp	Asp	Tyr	Met	Glu	Ala	Leu	Thr	Arg
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Leu	His	Ile	Thr	Val	Ser	Lys	Ala	Tyr	Lys	Val	Asn	Pro	Asp	Met	Asn

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      210              215              220
Ile Glu Thr Gln Arg Asp Ile His Gln Arg Ala Asn Asp Asp Leu Ala
225              230              235              240
Asp Ala Gly Leu Glu Lys Ile His Leu Ser Phe Tyr Leu Thr Ser Ile
      245              250              255
Tyr Asp His Ser Ile Phe Glu Ala Phe Ser Lys Val Val Gln Lys Leu
      260              265              270
Ile Pro Gln Leu Pro Thr Leu Glu Asn Leu Leu Asn Ile Phe Ile Ser
      275              280              285
Asn Ser Gly Ile Glu Lys Ala Phe Leu Phe Asp Val Val Ser Lys Ile
      290              295              300
Tyr Ile Ala Thr Asp Ser Thr Pro Val Asp Met Gln Thr Tyr Glu Leu
305              310              315              320
Cys Cys Asp Met Ile Asp Val Val Ile Asp Ile Ser Cys Ile Tyr Gly
      325              330              335
Leu Lys Glu Asp Gly Ala Gly Thr Pro Tyr Asp Lys Glu Ser Thr Ala
      340              345              350
Ile Ile Lys Leu Asn Asn Thr Thr Val Leu Tyr Leu Lys Glu Val Thr
      355              360              365
Lys Phe Leu Ala Leu Val Cys Phe Val Arg Glu Glu Ser Phe Glu Arg
      370              375              380
Lys Gly Leu Ile Asp Tyr Asn Phe His Cys Phe Arg Lys Ala Ile His
385              390              395              400
Glu Val Phe Glu Val Arg Met Lys Val Val Lys Ser Arg Lys Val Gln
      405              410              415
Asn Arg Leu Gln Lys Lys Lys Arg Ala Thr Pro Asn Gly Thr Pro Arg
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Val Leu Leu
      435

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&lt;210&gt; 3945

&lt;211&gt; 696

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3945

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480

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<210> 3946

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3946

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Gly	Ser	Ser	Gly	Gly	His	His	Arg	Ser	Gly	Asp	Pro	Gly	Leu	Ala	Ala
			20					25					30		
Gly	Leu	Gln	His	His	Lys	Ala	Val	Gly	Pro	Gly	His	Leu	Gln	His	Leu
			35				40					45			
Thr	Glu	Leu	Arg	Leu	Arg	Gln	Arg	Asp	Leu	Leu	Glu	Gln	Arg	Val	Gln
	50					55					60				
Gly	His	Ala	Ala	Pro	Val	Gly	Ala	Gln	Asp	Phe	Gly	Asp	Glu	Ala	Ala
65					70					75				80	
His	Leu	Arg	Val	Arg	His	Gly	Ala	Leu	Ala	Val	Leu	Ala	Leu	Pro	Arg
				85				90						95	
Arg	Gly	Thr	Arg	Phe	Arg	Gly	Asn	Arg	Lys	Ser	Lys	Leu	Thr	Ser	Val
			100					105					110		
Gln	Gly	Arg	Ala	Arg	Ala	Val	Leu	Leu	Leu	Gly	Ala	Pro	Gly	Val	Ser
			115				120					125			
Glu	Gly	Ala	Leu	Ser	Val	Ala	Val	Ser	Pro	Ala	Gln	Arg	Ser	Thr	Leu
	130					135					140				
Gly	Ser	Gln	Val	Lys	Arg	Leu	Asp	Leu	Thr	Asp	Arg	Val	Leu	Val	Ala
145					150					155				160	
Gly	Leu	Gln	Pro	Ala											
					165										

<210> 3947

<211> 400

<212> DNA

<213> Homo sapiens

<400> 3947

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 120  
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 180  
 gccagcgagc aggtaataca agacctaaag ggctcggact acagctgggc ctaccagacc  
 240  
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 300

agcagtagca gtgccaaagg tggcggaagc cccatggcct gggggtgccc aaacatactc  
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<210> 3948  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 3948  
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 20 25 30  
 Thr Met Leu Gly Glu Ile Thr His Leu Gln Gly Ile Ile Asp Asp Leu  
 35 40 45  
 Val Val Leu Thr Ala Glu Pro His Lys Leu Pro Pro Ala Ser Glu Gln  
 50 55 60  
 Val Ile Lys Asp Leu Lys Gly Ser Asp Tyr Ser Trp Ser Tyr Gln Thr  
 65 70 75 80  
 Pro Pro Ser Ser Pro Ser Ser Ser Ser Arg Lys Ser Ser Met Cys  
 85 90 95  
 Ser Ala Pro Ser Ser Ser Ser Ala Lys Gly Gly Gly Ser Pro Met  
 100 105 110  
 Ala Trp Gly Cys Pro Asn Ile Leu Thr Gln Phe His Leu Ser Leu Pro  
 115 120 125  
 Gln Pro Gly Ala Ala  
 130

<210> 3949  
 <211> 1462  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
 aaagagttgg gggaggaacc cctgaaagga gagccagaaa tgggggagct ccaaactctt  
 240  
 tgtgtcagct ctgtccaaat ctctaactga cttgtgaact aaaaagaaag gtttctacca  
 300  
 tcagcagact gtcaccata gacatttaca cagtattttg gtttggagtt cttcctaata  
 360  
 gtcacttcac agaaaaatat ataggtgctg ttttgccctg gaagccagac agatcagaat  
 420  
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 480  
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 720  
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 780  
 gcacccagtg gggatattaa ttggaggatt ttctataatt agttgcattt ctttttgtaa  
 840  
 gtactcggct atttcactcg cattgcgaac tattctggtg agctcttctc ttggatattg  
 900  
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 960  
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 1020  
 ccagtcccca tcttcagtac ggaaattctg agcttcgtca atgacgatgt gttgaatgtg  
 1080  
 ttcaaatttt tctcttagga aagtttcccg ggtctctgct cggcagatat ttctatcact  
 1140  
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 1200  
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 1260  
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 1320  
 ctgggctgtg agcagattta aaacctcaca gccgagctgg tcaactcaaga gagacctgaa  
 1380  
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<210> 3950

<211> 351

<212> PRT

<213> Homo sapiens

<400> 3950

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			20					25					30		
Ala	Gln	Gln	Tyr	Glu	Ile	Phe	Ser	Arg	Ser	Leu	Arg	Lys	Asn	Arg	Glu
		35						40					45		
Leu	Phe	Val	His	Gly	Leu	Pro	Gly	Ser	Gly	Lys	Asn	Ile	Met	Ala	Met
	50					55					60				
Lys	Ile	Met	Glu	Lys	Ile	Arg	Asn	Val	Phe	His	Cys	Glu	Ala	His	Arg
65					70					75				80	
Ile	Leu	Tyr	Val	Cys	Glu	Asn	Gln	Pro	Leu	Arg	Asn	Phe	Ile	Ser	Asp
				85					90					95	
Arg	Asn	Ile	Cys	Arg	Ala	Glu	Thr	Arg	Glu	Thr	Phe	Leu	Arg	Glu	Lys
			100					105					110		
Phe	Glu	His	Ile	Gln	His	Ile	Val	Ile	Asp	Glu	Ala	Gln	Asn	Phe	Arg

115	120	125
Thr Glu Asp Gly Asp Trp Tyr Gly Lys Ala Lys Ser Ile Thr Gln Arg		
130	135	140
Glu Lys Asp Cys Pro Gly Val Leu Trp Ile Phe Leu Asp Tyr Phe Gln		
145	150	155
Thr Ser His Leu Gly His Ser Gly Leu Pro Pro Leu Ser Asp Gln Tyr		
165	170	175
Pro Arg Glu Glu Leu Thr Arg Ile Val Arg Asn Ala Asp Glu Ile Ala		
180	185	190
Glu Tyr Leu Gln Lys Glu Met Gln Leu Ile Ile Glu Asn Pro Pro Ile		
195	200	205
Asn Ile Pro Thr Gly Cys Leu Glu Val Phe Pro Glu Ala Glu Trp Ser		
210	215	220
Gln Gly Val Gln Gly Thr Leu Arg Ile Lys Lys Tyr Leu Thr Val Glu		
225	230	235
Gln Ile Met Thr Cys Val Ala Asp Thr Cys Arg Arg Phe Phe Asp Arg		
245	250	255
Gly Tyr Ser Pro Lys Asp Val Ala Val Leu Val Ser Thr Ala Lys Glu		
260	265	270
Val Glu His Tyr Lys Tyr Glu Leu Leu Lys Ala Met Arg Lys Lys Arg		
275	280	285
Val Val Gln Leu Ser Asp Ala Cys Asp Met Leu Gly Asp His Ile Val		
290	295	300
Leu Asp Ser Val Arg Arg Phe Ser Gly Leu Glu Arg Ser Ile Val Phe		
305	310	315
Gly Ile His Pro Arg Thr Ala Asp Pro Ala Ile Leu Pro Asn Ile Leu		
325	330	335
Ile Cys Leu Ala Ser Arg Ala Lys Gln His Leu Tyr Ile Phe Leu		
340	345	350

&lt;210&gt; 3951

&lt;211&gt; 1012

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3951

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 gtccaggagt tccaggttcc ggattatggt ccatggcagc agtccaagca ggaaaccaag  
 180  
 ccatctactc tgcctccagt ccaacaagcc aacagccttc atacaagcaa aatgaagact  
 240  
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 300  
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 360  
 aaaatctggt taatgaagac ctgctcagg agcgggaggg ccgctctgcg agagctccga  
 420  
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 540

atcatcgaca tcttggagta ctcaaacaag aagaggctgc agcaattgaa atctgagctt  
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 660  
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 780  
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 1012

&lt;210&gt; 3952

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3952

Met	Lys	Thr	Leu	Thr	Arg	Val	Gln	Pro	Val	Phe	His	Phe	Lys	Pro	Thr
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Thr	Val	Val	Thr	Ser	Cys	Gln	Pro	Lys	Asn	Pro	Arg	Glu	Leu	His	Arg
		20						25					30		
Arg	Arg	Lys	Leu	Asp	Pro	Gly	Lys	Met	His	Ala	Lys	Ile	Trp	Leu	Met
		35					40					45			
Lys	Thr	Ser	Leu	Arg	Ser	Gly	Arg	Ala	Ala	Leu	Arg	Glu	Leu	Arg	Ser
		50				55					60				
Arg	Glu	Asn	Phe	Leu	Ser	Lys	Leu	Asn	Arg	Glu	Leu	Ile	Glu	Thr	Ile
65				70					75					80	
Gln	Glu	Met	Glu	Asn	Ser	Thr	Thr	Leu	His	Val	Arg	Ala	Leu	Leu	Gln
				85					90					95	
Gln	Gln	Asp	Thr	Leu	Ala	Thr	Ile	Ile	Asp	Ile	Leu	Glu	Tyr	Ser	Asn
		100					105					110			
Lys	Lys	Arg	Leu	Gln	Gln	Leu	Lys	Ser	Glu	Leu	Gln	Glu	Trp	Glu	Glu
		115					120					125			
Lys	Lys	Lys	Cys	Lys	Met	Ser	Tyr	Leu	Glu	Gln	Gln	Ala	Glu	Gln	Leu
		130				135					140				
Asn	Ala	Lys	Ile	Glu	Lys	Thr	Gln	Glu	Glu	Val	Asn	Phe	Leu	Ser	Thr
145					150				155					160	
Tyr	Met	Asp	His	Glu	Tyr	Ser	Ile	Lys	Ser	Val	Gln	Ile	Ser	Thr	Leu
			165					170						175	
Met	Arg	His	Cys	Ser	Arg	Leu	Arg	Thr	Ala	Ser	Arg				
			180					185							

&lt;210&gt; 3953

&lt;211&gt; 2900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3953

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300  
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720  
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